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THE JOURNAL OF AYURVEDA

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[No. 1.]

A Retrospect

The current issue introduces yet another new year in the annals of Journal of Ayurveda and, though not graceful, we congratulate ourselves for being spared to do some little bit of service towards popularising the great science of healing, viz. Ayurveda.

It is already known to our readers that the economical condition of almost all countries of the world is coming from bad to worse throughout the past few years and even the stalwart economists of the world are at a loss to find a way out of such a stringency. They had conferences, talks and resolutions and chalked out clear-cut plans to uplift the general condition of the mass and thereby raise national prosperity. But the result has been as disappointing as ever and it is not known how long the world will continue at the present condition of depression. We are, of course, very humble individuals and it is rather preposterous to deal with such great problems. But one thing may be said touching such conferences and meetings and that is that the conferences are not genuine; the delegates there do not meet with an open mind and everyone tries to protect the interest of his own country and disbelieves others. No success can therefore result from such conferences.

Economical condition is perhaps the worst in India, due to her dependency in every respect on other countries. She has sufficient raw materials which have got to be disposed of, so that she has to depend on other countries for her economical prosperity and in case her customers are not well off, there will be a dearth of

these for raw materials with the result that the producers, *i. e.* 90% of the population, will suffer financial inefficiency and consequently the whole country will be in the clutches of famine even in the midst of affluence. General trade dumping and indifferent buying capacity throughout the length and breadth of almost all countries of the world for the past few years have made the condition of already poor India most precarious and it needs hardly be said that something practical must be done in order to save the country from utter ruin.

The responsibility of improving the financial status of India does not only rest with the Government but every right-thinking Indian should also collaborate with the powers that be in matters touching industrial and commercial development. The Government on its part should revise its long enjoyed financial policy and run their affairs at a minimum cost as is the case with other Governments of other countries and utilise the surplus in national industries, commerce and trade and thereby relieve the people in distress as also solve the great problem of unemployment. It may be pointed out in this connection that if the Government can, at anytime, take to such a policy, it will not only command public sympathy, but it will also be able to rule the country without the help of ordinances as also at a minimum cost towards police, military and prison departments. We hope a day will soon come when this aspect of the problem will be apparent to every right-thinking man.

We are surprised to learn that the Hon'ble the minister for local Self-Government, we mean Sir B. P. Sinha Roy of Bengal, has brought out a bill in order to curb the powers of the Calcutta Corporation, the only popular institute of the province, for some alleged short-comings which seem rather dubious on careful examination. We do not really understand why such a measure should have been insisted upon when the Corporation itself invited the Government and asked them to hold a conference.

and settle the points at issue outside the peresent-day council. The former was even ready to take upon itself any punishment in case it was found guilty or to rectify its mistakes if it was found wrong. But that was not to be and the minister wants to have his way, so that the Corporation might be brought under the direct sway of the Secretariate building. The tenacity with which the bill is being hurried through the council makes us doubtful as to the motive behind. It seems that the profession of public interest and efficiency is a camouflage while the real motive behind is purely political and that is to free the Corporation from the influence of the Congress, which is now the dominant party there. A tree is known by its fruits and this incident ought to serve as a sample for the kind of Government India is going to have as a result of the deliberations in London for the past few years.

Whatever might have been the sins of omission or of commission on the part of the Congress-ridden Corporation and whatever might be the arguments for and against such allegations, we, on our part, must admit that the present Corporation under the accursed Congress party has done much greater work towards the improvement of the city's health than what it did under the I. C. S. regime. It has not only helped institutions like Chittaranjan Seva-Sadan and National Medical Institute to grow and develop but it has also been helping Ayurvedic Institutions and Hospitals like Jaminibhusan Astanga Ayurvedic College, Vaidyasastra Peeth and Govinda Sundari Ayurvedic College. It has also been helping some free Homeopathic dispensaries of the town for the benefit of the poor and destitute.

In this connection, we are glad to announce that our Mahamahopadhyaya S. Gananath Sen, M.A., L.M.S., Saraswati, our late editor-in-chief, has opened an Ayurvedic College, under the name and style of Vishwanath Ayurvedic Mahavidyalaya to commemorate

the name of his late father Kaviraj Vishwanath Sen at 94 Grey Street. We also understand that an Ayurvedic Hospital has been attached to same with both in-door and out-door departments. The indoor hospital has now 50 beds and we understand that the illustrious founder will increase the number whenever occasion will demand.

Be it also said to the credit of the Mahamahopadhyaya that the palatial building containing the College and Hospital is his personal gift towards Ayurveda and Ayurveda should remain ever-grateful to him. We also understand that the Corporation has sanctioned a decent sum, both recurring and non-recurring, for the maintenance of such an institution. Our heart-felt congratulations go to this latter body. We hope the institution will function well under the direct supervision and management of the great Kaviraj who, we trust, will spare no pains to make it a success and take sufficient care in the selection of teachers as well as students. Almost all the great and standard works on Ayurveda are in Sanskrit, not easy to be understood by each and every one posing himself as a Kaviraj nor is it easy for every class of students to follow Ayurveda properly unless they possess a very good knowledge of the classical language. Hence it should be an incumbent duty on the part of the founder to see that only efficient teachers, well versed in Ayurveda as also in Sanskrit and English, are appointed as teachers. A preliminary knowledge of good Sanskrit and English should also be the criterion for admission of students and a Matriculation pass, or a *Madhya* pass with a fair knowledge of English should be the minimum qualification for admission to such institutions. We are sure that this matter will not escape the attention of the founder, who is the President and Principal of the College, while in the actual field and a charge of nepotism will never be levelled against him, considering the spirit in which the work has been taken up.

H. N. C.

Original Articles

THE TIBETAN SURGICAL INSTRUMENTS.

BY

DR. GIRINDRA NATH MUKHERJEE, B.A., M.D., F.A.S.B.

Calcutta.

In the Journal and Text of the Buddhist Text Society of India, Vol. II, Part III, 1894, there are three plates of the Surgical instruments of Ancient India and Tibet, Plate I, II, and III. I have considered them as the original Plates. In these plates the numbers affixed to each instrument begin from I and run consecutively in each plate. In the same volume, there is a descriptive key to those instruments, but apparently the numbers, used there in, refer to the instruments of Plate III, and even there the numbers in the descriptive key do not tally with the numbers in that plate. I have therefore arranged the instruments in plates numbering from 1 to 20. The basis of this arrangement is the similarity of function performed by the instruments in each plate.

In these plates we have drawings of the surgical Instruments of the native surgeons of Tibet. The drawings are wanting in the perspective and are roughly drawn, but have their explanations in descriptions of their use given in Tibetan.

In my book, *the Surgical Instruments of the Hindus*, Vol. I, P. 357, I noted,—In the *Journal of the Buddhist Text Society* of Calcutta for 1894, these Tibetan block prints are illustrated which contain representations of a large number of surgical instruments, some of them of an elaborate nature, including specula, saws, catheters, exploring needles, instruments for tapping hydrocele, and midwifery and other forceps. The block-prints were brought by Rai Sarat Chandra Das Bahadur from Lhasa, and a description of the figures was given by the late Lama Ses-rah MGyamtscho, the Abbot of the Ghoom Monastery, near Darjeeling who was formerly physician to the late Tashi Lama, which were explained in a paper read by Dr. Sarada Prasad Banerjee entitled *A Note on the Illustrations of the Surgical Instruments of Tibet*. I also quoted in the same volume, PP. 356-7, the opinion of

Dr. Walsh, who remarks in a *Note on the Tibetan Surgical Instruments*:—The present position of surgery in Tibet is very simple, and as already noted, consisting chiefly of cupping, cauterizing, and bleeding. The Am-chhi informed me that the only instrument used are cupping-bow (*me-pun*, or *me-bum* both meaning the fire-vessel) in which, paper is bit and the bowl is placed, while hot, over the part to be blistered; the sucking-horn of which cupping by vacuum is done; the cautery, the lancet for bleeding and a golden lancet for operating on the eye.

In Vol. II. of the *Surgical Instruments of the Hindus*, there are many drawings of the Instruments used by the Hindu Surgeons in ancient times. Like these instruments, about which detailed information has been given in the first volume of *S. I. H.* the Tibetan instruments have also been collected in plates, and the legends about them have been given in each plate. These instruments after their prototype in India have been made to resemble certain objects such as leaves, bills of birds and the mouth of animals.

We have used some abbreviations for the numbering of the instruments in the plates. The plates no. I, II, and III of the Journal have been designated 'Original plate number'. The numbers in the descriptive key given by Dr. Banerjee are represented by D. Number. The numbers I have given in the present plates are referred to as new numbers. S. I. H. stand for *Surgical Instruments of the Hindus*.

PLATE I.

Tubular Instruments for Inhalation and Fumigation.

| | |
|---------------|----------------------------|
| New number 1. | No. 12 of Original Plate I |
| " " 2. | " 28 " " " II |
| " " 3. | " 5 " " " III |

The two instruments are No. 12 of original plate I, and no 28 of original plate II.

| | |
|-------------|--|
| No. 1 (New) | is an inhaler with three tubes. |
| " 2 " | is an inhaler with two tubes. |
| " 3 " | is an inhalation tube. Compare plate xxxii no 1 in S. I. H. Vol. II. |

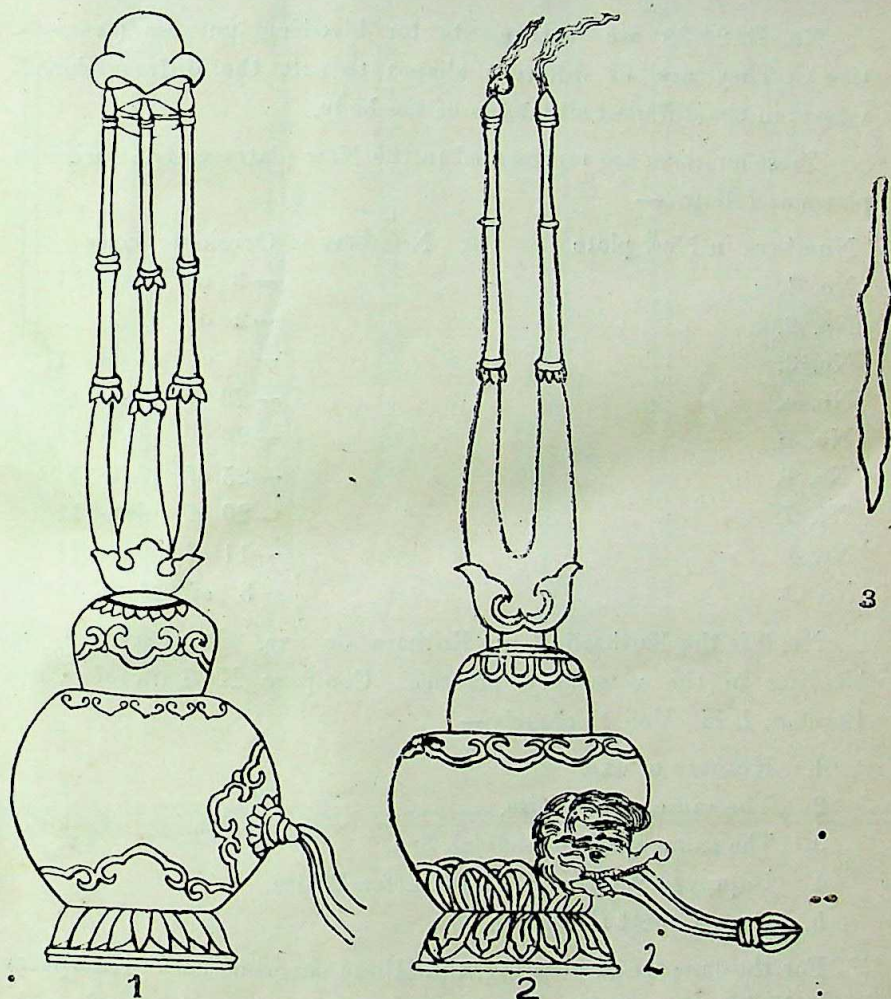
In the D. 49 it is described as a kind of inhaler. It is just like in appearance at the top of which there are three openings, leading into the three tubes tapering at their ends. Two of these tubes are inserted in the nasal cavities and the middle one in the

mouth, for inhaling medicated vapour. This has got a tap or outlet, through which the water flows out and the air is let in.

The instrument no. 2 is a similar instrument, in which two tubes instead of three are inserted to serve for the two nostrils.

The inhalers used in ancient times had one or two tubes for the two nostrils. For medication in the nasal cavities they had single or double nasal tubes called *Natthukarani* and *Yamaka Natthukarani*, which are figured in S. I. H. Vol. II.

PLATE I.



1. Inhaler with three tubes.
2. Inhaler with two tubes.
3. Dhuma nadi or tube for smoking. The sacculated appearance of the tube is to be marked and a similar pipe is described in Sanskrit text books.

The tubular instruments of the Hindus for inhalation and fumigation are represented in the Plate xii of S. I. H. Vol. II. namely—

The Dhumanadi.
Mallakasamputa or Sarabasamputa.
Hippocratic fumigator.
Bronchitis Kettle (modern).

PLATE 2.

Bleeding Instruments.

No. D. 24-38 are instruments for bleeding purpose (venisection). They are of different shapes to suit the different blood-vessels in the different situations of the body.

These numbers are represented in the New plates and the original plates as follows.—

| Numbers in New plate | Numbers in Original Plates |
|----------------------|----------------------------|
| No. 1. | —3 of plate 11 |
| No. 2. | —2 of „ „ |
| No. 3. | —5 of plate 1 |
| No. 4. | —29 of plate 11 |
| No. 5. | —26 of plate 11 |
| No. 6. | —25 of plate 11 |
| No. 7. | —20 of plate 11 |
| No. 8. | —11 of plate 11 |
| No. 9. | —8 of plate 111 |

No. 9 is the Kutharika, or Kuthara or axe. It was used for bleeding in the veterinary practice. Compare Kuthara of Plate IX of S. I. H., Vol. II namely—

1. Kuthara or axe.
2. The same, after Wise.
3. The same, after Benodelal Sen.
4. Improved veterinary Fleam, after White.
5. Gum Lanceet (Modern).

For the purpose of bleeding, the Hindu surgeons used Kusapatra knife, Vrihimukha sastra, Utpalapatra Sastra, etc.

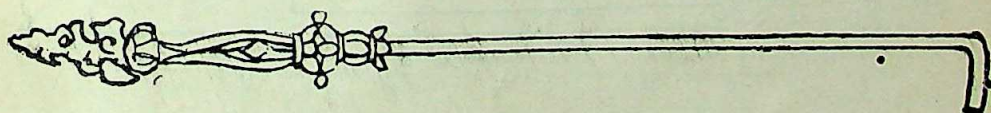
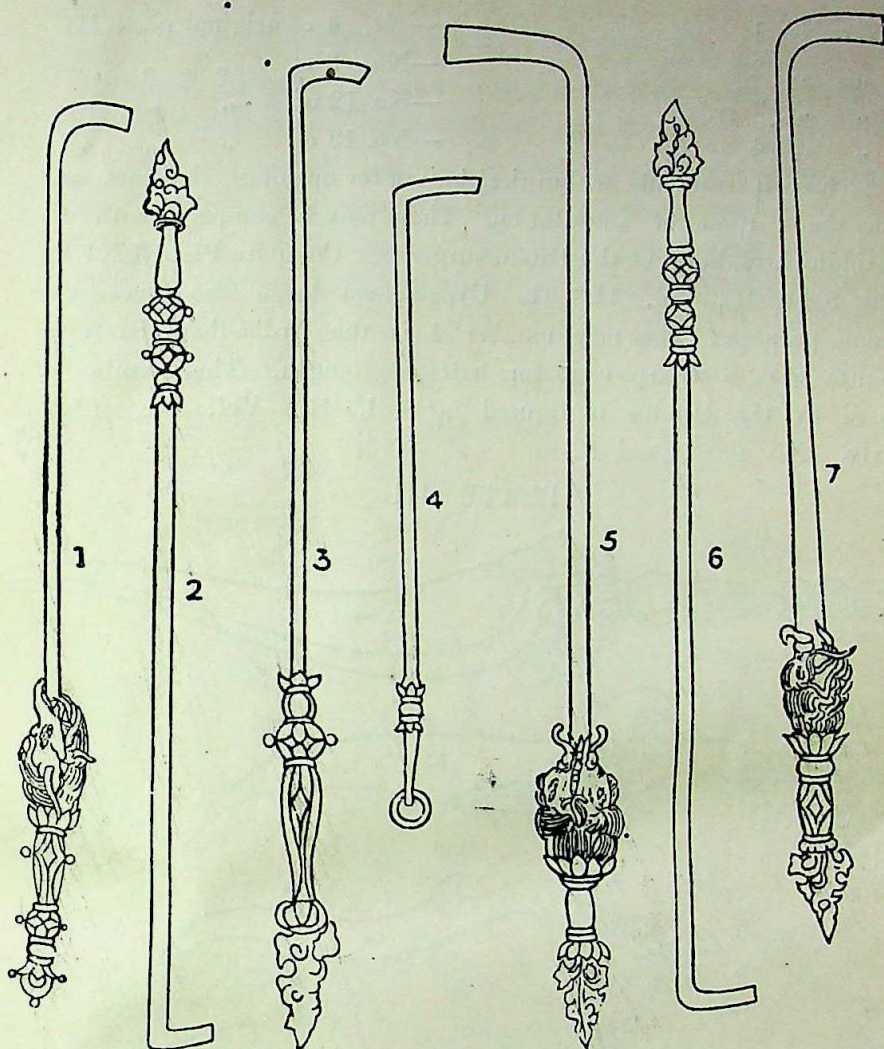
Compare Utpalapatra knife Plate LXIV. Phlebotome in S. I. H., Vol. II.

Kusapatra knife in Plate LXVI.

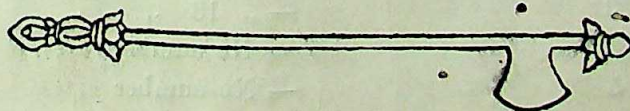
Vrihimukha Sastra in LXXI.

„ „ „
„ „ „

PLATE II.



8



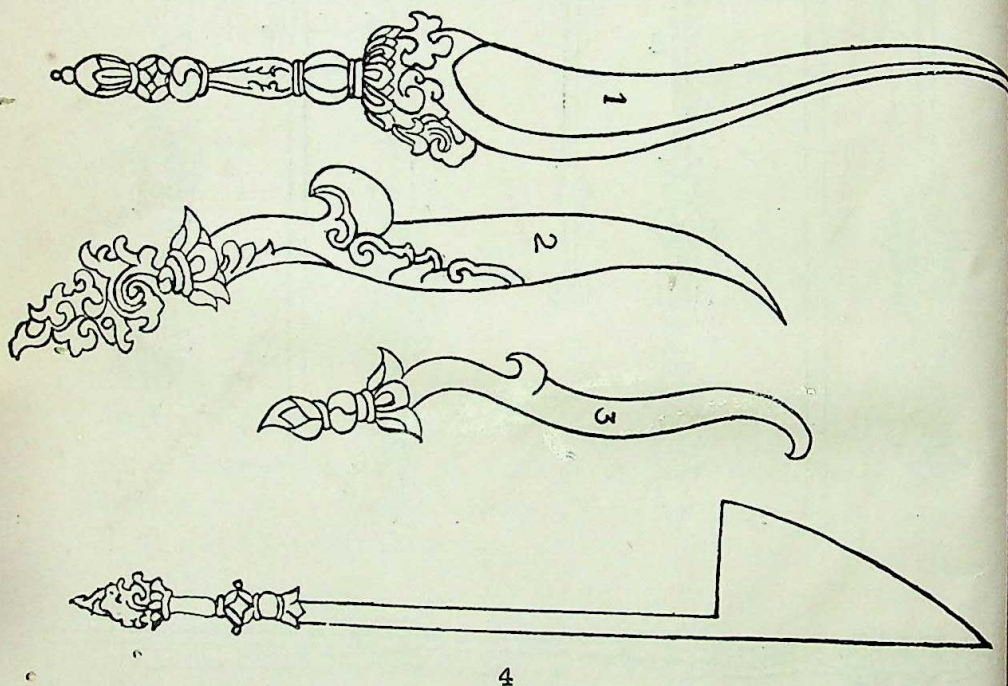
9

PLATE 3.

| | |
|-----------|-------------------------------|
| New No. 1 | —No. 4 of original plate III. |
| „ „ 2 | —No. 3 of „ „ „ |
| „ „ 3 | —No. 12 of „ „ „ |
| „ „ 4 | —No. 13 of „ „ „ |

These instruments are surgical knives for opening abscesses and for the purpose of amputation. These may be compared with the Vriddhipatra knife of the Hindu surgeons. Compare Plate LXI in the S. I. H., Vol. II. The Utpalapatra knife also serves the same purpose. The new number 4 is the Ardhadhara Knife or Knife with a sharp edge for half its length. This knife as used by the Hindus is figured in S. I. H., Vol. II., Plate lxiv. No. 6, 7 and 8.

PLATE III.



PLAT 4.

| | |
|-----------|-----------------------------|
| New No. 1 | —No. 7 of original plate I. |
| „ „ 2 | — „ 8 „ „ „ „ |
| „ „ 3 | — „ 16 „ „ „ „ |
| „ „ 4 | —No number |
| „ „ 5 | —No number |
| „ „ 6 | — „ 9 of „ „ „ |
| „ „ 7 | — „ 15 „ „ „ „ |

No. 1 and 2 are described in D. 54. These are vessels for keeping fire.

No. 4 is a medicine seive corresponding to D. 56.

No. 6 is a kurcea, an instrument for bleeding nasal polypus or congested nasal mucous membrane in Nasha fever.

No. 4 is evidently a Sringa or horn to be used by the surgeon. For a description of the uses of a sringa or horn in surgical practice, the reader is referred to The Surgical Instruments of the Hindus, vol. 1., pp. 148-50. Compare plate No. XXXIII, XXXIV, XXXV. in S. I. H. Vol. II.

No. 5 Instrument is possibly a cupping instrument.

PLATE IV.

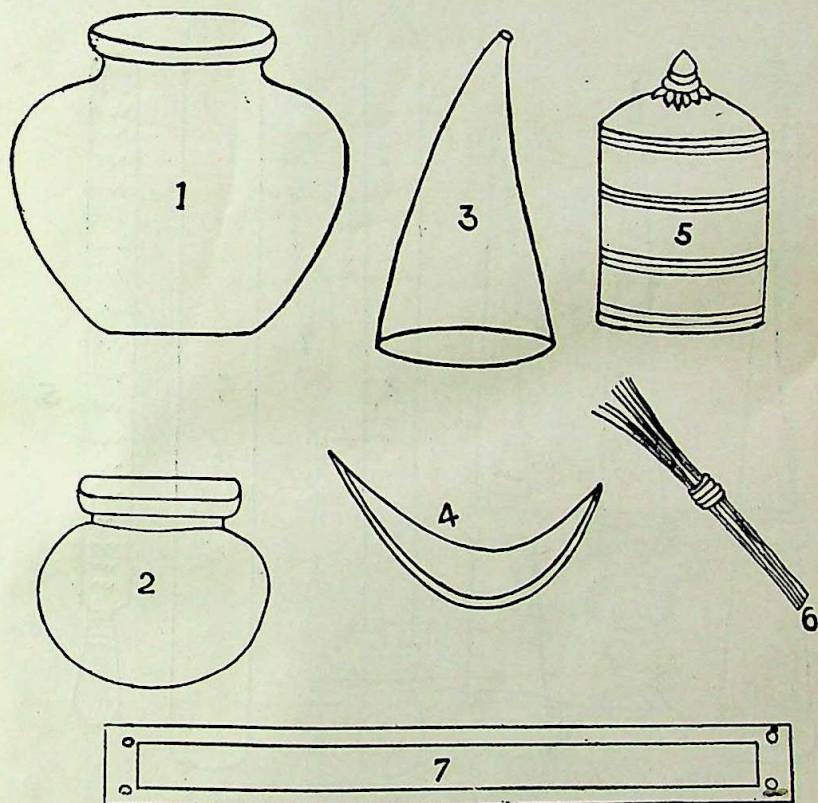


PLATE 5.

| | | |
|---------|----|------------------------------|
| New No. | 1. | — No 18 of original plate 1. |
| " " | 2. | — " 3 " " " |
| " " | 3. | — " 19 " " " |
| " " | 4. | — " 20 " " " |
| " " | 5. | — " 24 " " " |

II

Numbers 1 and 2 are represented as D. 39 and D. 40. These are instruments for boring bones.

Numbers 3, 4, and 5 are represented as D. 52. It is described as a spatula used for making powders and for making the mass of pills.

The numbers 1 and 2 may be compared with Ara or Awl of the Hindu surgeons in Plate LXVII, S. I. H., Vol. II. The use of Ara or Panimantha according to Susruta to perforate the bone in disease of the medullary canal is noted in page 263 of S. I. H., Vol. I.

PLATE V.

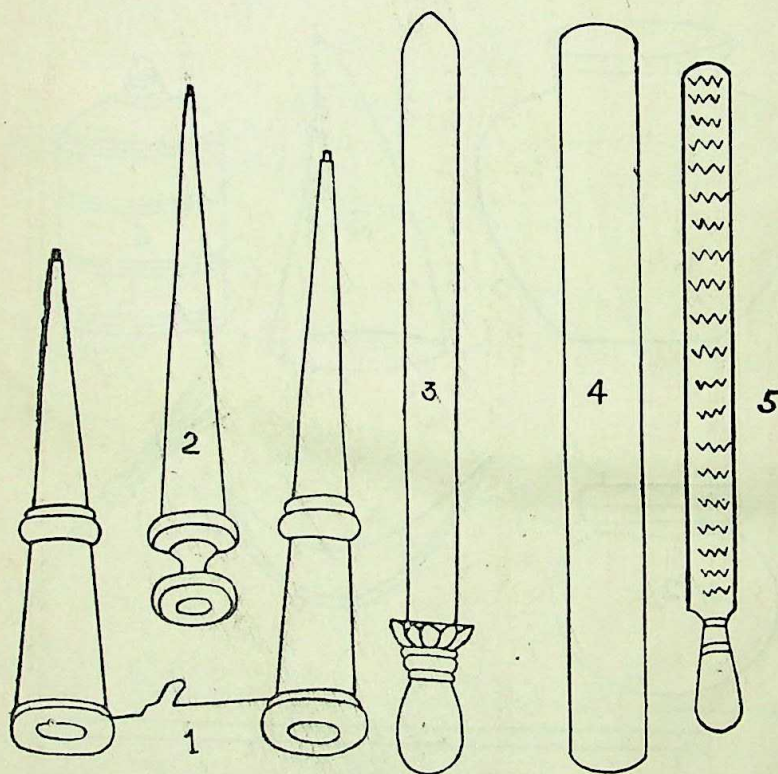


PLATE 6.

| | | | | | | | |
|---------|----|------|----|----|----------|-------|------|
| New No. | 1. | — No | 19 | of | original | plate | III. |
| " " | 2. | — | " | 21 | " | " | " |
| " " | 3. | — | " | 14 | " | " | " |
| " " | 4. | — | " | 7 | " | " | " |
| " " | 5. | — | " | 10 | " | " | " |
| " " | 6. | — | " | 16 | " | " | " |

Nos. D. 17, D. 18, D. 19 are represented by new no. 1, 2, 3, 4, and 5. These have heads or points resembling a lion's mouth, crow's bill, crane's bill and are used as forceps, nippers and pinchers. Each of these is nine inches in length, with a turning screw at the junction and rings attached to the handles.

No. D. 23 is called Chumati. It is No. 6 in this plate. It is said to be used as forceps for picking up skin, muscles, etc.

With these instruments may be compared the Svastica yantras of the ancient Hindus. For the Svastica Yantras, see Plates XI—XVI of S. I. H., Vol. II.

PLATE VI.

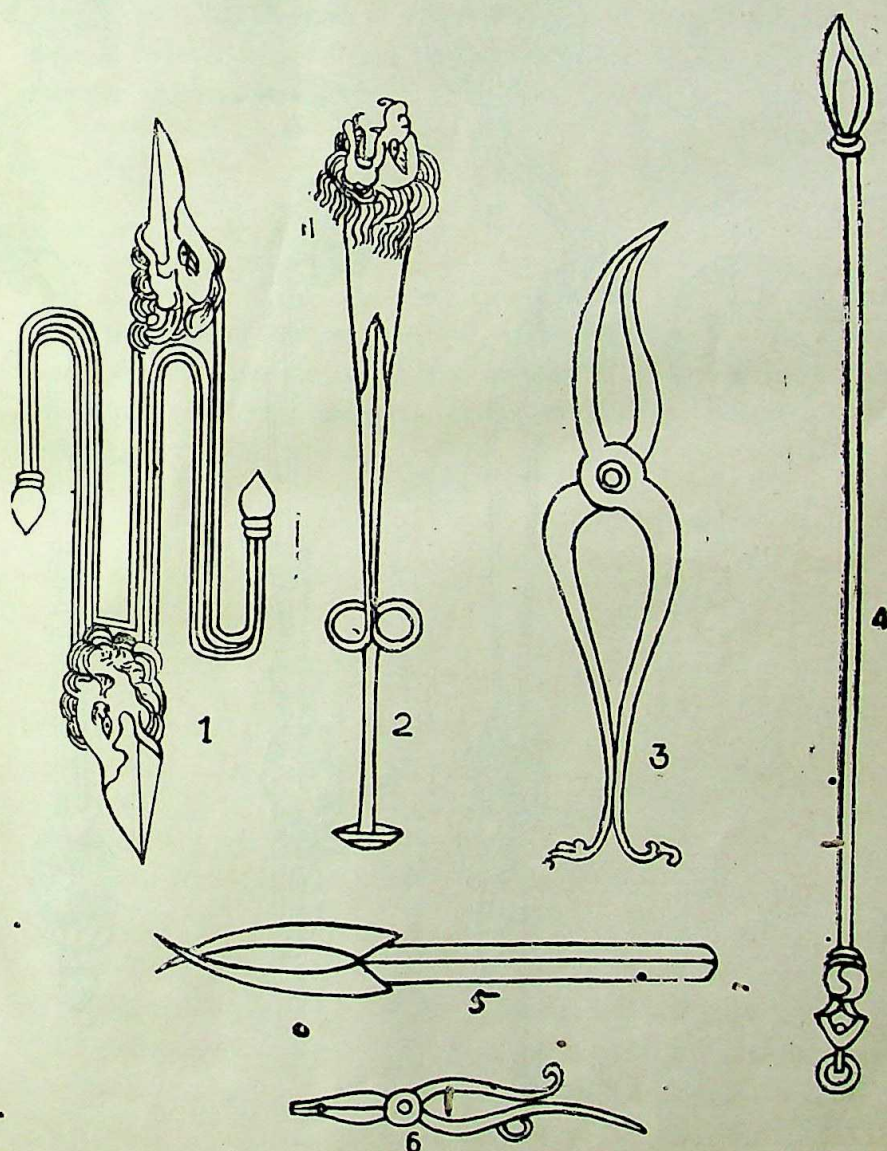


PLATE VII.

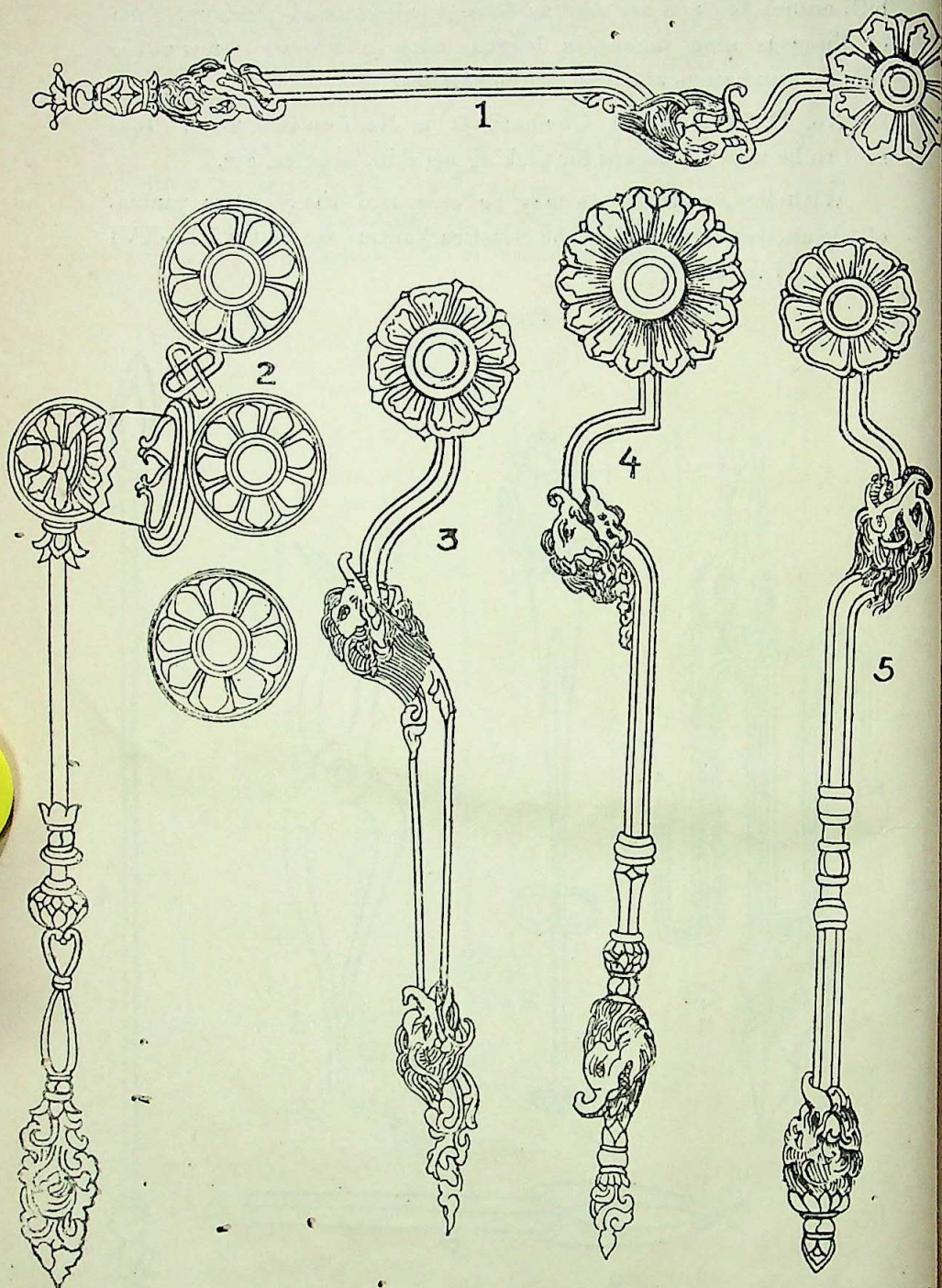


PLATE 7.

| | |
|-------------|-------------------------------|
| New No 1. . | —No. 23 of original Plate II. |
| „ „ 2. | — „ 14 „ „ „ „ |
| „ „ 3. . . | — „ 6 „ „ „ „ |
| „ „ 4. | — „ 13 „ „ „ „ |
| „ „ 5. | — „ 4 „ „ „ „ |

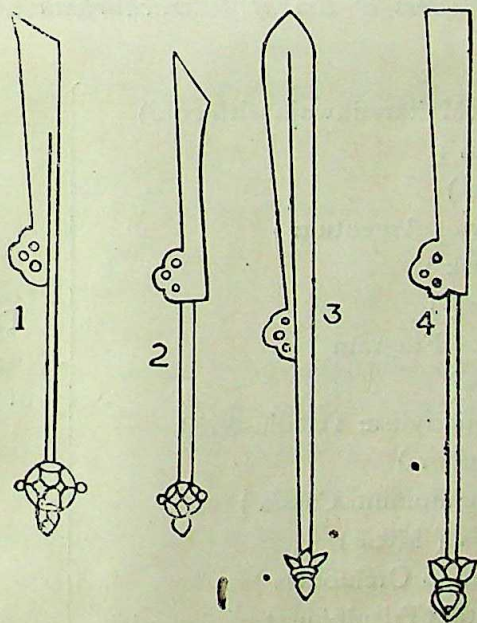
These instruments are referred to in the D. 51. It looks like a full-blown flower; it has not a round hole in the centre, through which the affected parts are cauterised. It thus prevents the surrounding parts from being burnt unnecessarily. The ancient Hindus had no instruments similar to them. But the purpose was served, as taught by Susruta, by means of plates of copper, lead or iron. In the application of cauteries, plates of these metals are to be used to surround a tumour to prevent injury to the surrounding parts or adjacent structures (S. I. H., Vol. I, p. 218).

PLATE 8.

| | |
|------------|------------------------------|
| New No. 1. | —No. 17 of original plate I. |
| „ „ 2. | — „ 15 „ „ „ III |
| „ „ 3. | — „ 11 „ „ „ III |
| „ „ 4. | — „ 9 „ „ „ III |

These instruments are described as D. 55 which is noted as bell-metal razor. The razor of the ancient Hindus resembled the Vriddhipatra Knife and was used for shaving. See S. I. H., vol. I., pp. 234-36.

PLATE VIII.



(To be contd.)

FEVER IN AYURVEDA

BY

KAVIRAJ A. C. KAVIRATNA

*Calcutta.**(Continued from our last issue.)*

Take equal parts of the above, rub together in a mortar and add in *Vavana* process for three days juice of Citrus Limonum (Gonra Lemon), Occimum Sanctum (Tulsi leaf), Plantago, Rosea root (Chita Mool), Canabis Indica (Siddhi leaf) and Tamarind Indica (Tentul leaf). Mix these well together into a mass and prepare pills of pea size and then get the pills dried up in shady place.

This preparation is a very potent medicine for fever as well as it promotes digestion and elimination of toxic wastes in the system. It is an excellent remedy for remittent as well as intermittent fevers and is prescribed with a suitable vehicle after favorably indicating the condition of the patient. It is generally given with ginger juice or with lemon juice.

Recipes of Brihat Jwarachuramani.

I. R/

Swarnasindura (Makaradhwaja with gold)

Swarna (Aurum)

Lauha (Ferrum)

Reduced Roupya (Argentum)

Mriganavi (Musk)

Jaiphal (Nutmeg)

Jaitri (Myristica Fragram)

Lavaga (Cloves)

Gokshura (Tygophylisæ Tribulusteris)

Karpura (Camphor)

Darchini (Cinnamomum Cassia)

Corrected Abhra (Mica)

Talmuli (Circuligo Orchioides)

Corrected Harital (Trisulphuret of Arsenic)

Take one tola
weight of each
of the ingredients.

| | | |
|--------------------------------------|---|--|
| Gandhaka (Sulphur) | } | Take two tolas weight of each of the ingredients |
| Probala (Corallum Rubrum) | | |
| Rasasindur (Sulphide of Mercury) | | |
| Mouktika (Margarita) | | |
| Swarnamakshika (Ferri Sulphuretum) | | |
| Kantapasan (Loadstone) | | |
| Tuntiya (Copper Sulph.) | | |

The above should be nicely compounded in a mortar and then either fresh juice or decoction of the plants sated should be added one after the other in *Vavana* process in their order, Viz. Nisinda leaf (*Vitex Trifolia*), Bamunhati (*Cleroderdrum Siponanthus*), Vasaka Bark (*Adhatoda Vasaka*), Akanda root (*Calotropis Gigantica*) and Gokshura (*Tygapophyllæ Tribulus-teris*). The process of adding the juice should be repeated seven times in the above serial order. Then the above should be rubbed into a mass and pills of 4 grains each should be prepared for use. The medicine may be advantageously used in almost all the eight kinds of fevers described in Ayurveda. In *Vata* derangement, it is given in curd whey ; in *Pitta* derangement, in roasted *Patal* Juice and in *Kapha* derangement it is given with honey and Long Pepper.

Recipes of Kasturibilash are as under :

R/

Rasasindura (Sulphide of Mercury)
 Reduced Abhra (Mica)
 „ Sohaga (Sodii Biboras)
 Pulv. Dry Ginger (*Zingiber Officinalis*)
 Mriganabhi (Musk)
 Pipul (*Piper Longum*)
 Siddhi-Beeja (*Canabis Sativa*)
 Karpur (Camphor)
 Dantimool (*Jatropha Montana*)
 Marich (*Piper Nigram*)

Mix the above well in equal quantity and rub in the juice of ginger for seven times in *Vavana* process to a mass and prepare pills of 4 grains each for administration.

It would be invaluable in simple fever, specially where there is corryza, cough, derangement of *Vata* or *Vata-slesma*, pain in the chest, headache, giddiness, pain in the joints and limbs and as also in the enlargement of the glands and testes.

It is administered with pan leaf (Betel leaf) juice in simple cold and in Pipul powder (Piper Longum) in *Slesmic* and *Vata-slesmic* types of fever with honey and ginger juice ; in pain in chest, with honey and Bansalochana (Matina of Bamboo) ; in glandular swelling, with honey and Nisinda (Vitex Trifolia) leaf juice and in pains of joints and limbs it acts well with Bael (Aegle Marmelos) leaf juice and honey or with root of *Reri* (Racinus commando) and dry ginger.

Therapeutic action of the ingredients is as under :

Mercury (Hydrargyrum)—Antiseptic, sialagogue, cholagogue, tonic, anti-pyretic and alterative. In small doses, it stimulates the secretion of biles and liver and nourishes the cells.

Sulphur (Gandhaka)—Bitter, astringent, alterative, tonic, laxative, diuretic and insecticide. It is widely used with mercury in almost all diseases and stimulates the secretion of liver, kidneys, skin and mucous membrane.

Copper (Cuprum)—Equilibrates *Kapha* and *Pitta*, antiseptic, antispasmodic, alterative and emetic ; useful in piles, leprosy, skin diseases, typhoid fever, phthisis, asthma and bronchitis.

Hingula (Cinnabar)—Antiseptic, sialagogue, purgative, alterative, tonic and is indicated in almost all sorts of fever.

Iron (Ferrum)—Powerful tonic, alterative, astringent and restorative, improves quantity and quality of blood and stimulates the functional activity of all the organs of blood and for this reason it is extolled as an excellent restorative tonic ; useful in anæmia, bleeding piles, hæmorrhage, hæmoptysis, leucorrhœa, albuminuria, chronic dyspepsia, sluggish liver, enlarged spleen and vitalizes the cells.

Banga (Stanum)—Tonic, alterative, improves health and strengthens organs. It is invaluable in painful micturition, sexual debility, impotence, diabetes, gonorrhœa, leucorrhœa and spermatorrhœa.

Swarnamakshika (Ferri Sulphuretum)—Tonic, alterative : indicated in anæmia, ascites, anasarca, leucorrhœa.

urinary and eye diseases. It is efficacious in lumbago, rheumatism, hysteria and heart diseases.

Kharpara (Zinci Carbonas)—Nervine tonic, alterative, astringent and useful in leucorrhœa, gonorrhœa etc. It is used by the kavirajes as a collyrium for eye diseases.

Monchhal (Bisulphuret of Arsenic)—Alterative, febrifuge and tonic : indicated in asthma, catarrhal complaints and affections of the skin.

Gold (Aurum)—Nervine tonic, alterative, aphrodisiac, diuretic, diaphoretic : promotes flow of kidneys, stimulates activities of stomach and digestion and prevents decay.

Abhra (Mica)—Astringent, alterative and stimulant. It stimulates metabolic action of tissues and cells and is useful in urinary diseases, sexual debility, anæmia, leucorrhœa etc.

Girimati (Red Chalk)—Sweet, astringent, hæmostatic, anti-phlegmatic, and anti-bilious.

Sohaga (Sodii Biborus)—Antiseptic, diuretic, digestive, local sedative ; promotes flow of gastric juice.

Silver (Argentum)—Tonic, stimulant, aphrodisiac, astringent, cooling, demulcent, alterative ; alleviates *Vayu* and *Pitta*, rejuvenates and improves memory and intelligence.

Mriganavi (Musk)—Excellent heart and nerve stimulant and a first class remedy *par excellence* to improve circulation and raise arterial tension. In action it is stimulant, aphrodisiac, expectorant, diaphoretic, diuretic and anti-spasmodic.

Jaitri (Myristica Fragam)—Aromatic, tonic, nervine stimulant, carminative, anti-spasmodic, diuretic, emmenagogue and sedative.

Jaiphal (Nut Meg)—Aromatic, stimulant, carminative, aphrodisiac and tonic.

Lavanga (Cloves)—Stomachic, carminative, aromatic, anti-spasmodic, anti-emetic, local anæsthetic, nutritive, relieves gastric and intestinal pains and spasm and promotes salivation.

Gokshura (Tygophyllæ Tribulusteriis)—Cooling, demulcent, diuretic, tonic, aphrodisiac. It is widely used in diseases of genito-urinary system, Viz. Gonorrhœa, gleet, chronic cystitis, spermatorrhœa, phosphaturia, impotence, blood-urine or suppressed urine.

Karpura (Camphor)—It is useful in febrile delirium, whooping cough, hiccough, spasmodic asthma, hysteria, epilepsy, puerperal mania, acute rheumatism and chronic bronchitis. In action it is bitter, pungent and in taste aromatic.

Daruchini (Cinnamomum Cassia)—Aromatic.

Mouktika (Margarita)—Indicated in phthisis, asthma, cough, low fever, nervous diseases, painful micturition, impotency, jaundice, dyspepsia and diseases of *Pitta* derangement. In action it is an excellent stimulant, aphrodisiac, nervine tonic, nutritive, sedative and laxative.

Swarnamakshika (Ferri Sulphuretum)—Tonic, alterative, Tridoshaghna, (equilibrates Vayu, Pitta and Kapha): indicated in slow fever, chronic ailments, leucorrhœa, urinary diseases, anæmia, anasarca and acites.

Kanta-pasan (Load stone)—For its action see under Ferrum described in the foregoing pages.

Tuntiya (Copper Sulph.)—Powerful astringent, emetic, anti-septic and Rajasthapaka (styctic). According to Bhabaprokasha and Vaisajyatantra, it is useful in relapsing fever, enlargement of spleen and liver. In Rasendrasarsangraha, it has been recommended for indigestion during pregnancy, puerperal diarrhœa and puerperal fever.

Actions of Ginger, Pipul, Karpur and Marich have already been described.

Siddhi-Beeja (Canabis Sativa)—Intoxicant, sedative in large dose, stimulant, aphrodisiac, strong exhilarant, hypnotic, digestive and possesses special exhilarating action on the genital organ.

Dantimool (Jatropha Montana)—Purgative and antacid. It is useful in constipation, flatulence, anasarca and jaundice.

VATA SLESMIC FEVER.

Sitari Rasa is an efficacious remedy for Vata-Slesmic type of fever.

Recipes of Sitari Rasa

पारदं गन्धकं शुद्धं टङ्गणञ्च समं समम्
 पारदाद्दिगुणं देयं जौपालं तुषबर्जितम्
 सैन्धवं मरिचं चिञ्चालगन्धम शर्करापिच
 प्रत्येकं सूतकं तुल्यं जम्बीरैर्महद्भेद्भिन्म
 द्विगुञ्जस्ततोयेन वातस्य मज्जरापहर
 रसः शीतारिनामायं शीतज्वरहरः परः ॥

R/

| | |
|--|--------|
| Purified Mercury (Hydragryum) | 1 tola |
| „ Sulphur | 1 „ |
| „ Borax | 1 „ |
| „ Jaipal (Croton Tiglicum) | 2 „ |
| Pulv. „ Saindhav (Rock Salt) | 1 „ |
| „ Black Pepper (Piper Nigrum) | 1 „ |
| „ Tentul Bark Vasma (Tamarind Bark) | 1 „ |
| Corrected Aconite Ferox (Amrita) | 1 „ |

Mix the above well in a mortar and rub for 24 hours in juice of Jambira (Citras Limonum) to a mass and prepare pills of 4 grains each.

The medicine is to be prescribed in hot water base with a considerable success in *Vata-Slesmic* type of fever.

Therapeutic action of the ingredients is as under :—

Action of corrected Mercury, Sulphur and Borax has already been described under *Mrityunjaya Rasa*.

Corrected Jaipal (Croton Tiglicum)—Drastic purgative and vermifuge.

Saindhav (Sodium Chloride Impura)—Digestive, stomachic, and appetiser. In large doses it is cathartic and emetic.

Black Pepper (Piper Nigrum)—Pungent, carminative, anti-periodic, resolvent, anti-pyretic and useful in piles, hæmoptysis, hæmorrhage and urinary diseases.

Tentul Bark Vasma (Tamarind Indica)—Carminative, digestive, laxative, antacid. It is very useful in colic.

Corrected Mitha (Aconite Ferrox)—Diaphoretic, diuretic, anti-diabetic, and anti-pyretic. It is useful to bring down the tension and frequency of pulse and is a sedative for the respiratory centres. In large doses it is a powerful sedative and poison.

Jambira (Citras Limonum)—Anti-scorbutic, refrigerant, antacid, stomachic and carminative.

In Tritiaka—Azar (Tartian type of fever)

Mohanisadhadi decoction is prescribed with encouraging result.

Recipes of Mohani Sadhadi decoction :—

R/.

Sunth (Dry Ginger or Zingiber Officinalis)

Guduchi (Tinospora cordifolia)

Mustaka (Cyperus Rotundus)

Red Sandal wood (Peterocarpus Santalines)

Benamool (Root of Andropogon Muricatum)

Dhania (Coriander)

Take equal parts of the above weighing 2 tolas in all, boil the above in 1 lb. of water over a gentle fire and reduce to 4 oz. To be given twice a day added with a little quantity of sugar. This should be continued for three days to cope with the trouble.

Besides the above decoction, Ushiradi and Pataladi decoctions are useful in Tritiyaka fever and should be used with advantage.

Therapeutic action of the ingredients is as under :—

Sunth (Zingiber Officinalis)—Aromatic, carminative, Stomachic, digestive, stimulant and sialagogue. It promotes secretion of salivary glands and *slesmanasaka*.

Guduchi (Tinospora Cordifolia)—See action of Guduchi under Tritiyantaka Rasa.

Mustaka (Cyperus Rotundus)—See its action under Sitari Rasa.

Red Sandal Wood (Peterocarpus Santalines)—Mild astringent and tonic. It is highly efficacious in bleeding piles, hæmorrhage and dysentery. It is soothing to the genital organs.

Benamool (*Andropogon Muricatus*)—Diaphoretic, diuretic, antispasmodic, stimulant, tonic and emmenagogue.

Dhania (*Coriandrum Sativa*)—Aromatic, Carminative, stomachic, stimulant, antibilious, tonic, refrigerant, diuretic and aphrodisiac.

Recipes of the decoctions are as under :—

Ushiradi decoction.

R/

Benamool root (Root of *Andropogon Muricatum*)

Red sandal wood (*Peterocarpus Santalines*)

Mustaka (*Cyperus Rotundus*)

Guduchi (*Tinospora Cordifolia*)

Sunth (*Zingiber Officinalis*)

Take equal parts of the above ingredients to a total weight of 2 tolas, boil in 1 lb. of water and reduce it to 4 oz. To be given twice or thrice a day with a little honey and sugar. The preparation would be highly efficacious if the fever is attended with thirst and burning sensation.

Therapeutic action of the ingredients has already been described above.

Pataladi decoction :—

R/

Palta (*Hemidesmus Indica*)

Neem Bark (*Azadirachta Indica*)

Kismis (Raisin)

Shyamalata (*Ichnocarpus Frutescens*)

Triphala (Compound of Three Myrobalans)

Vasaka Bark (*Adhatoda Vasaka*)

Take equal parts of the above ingredients weighing in all 2 tolas and boil in 1 lb. of water which is to be reduced to 4 oz. The decoction thus prepared should be given twice a day with a little honey and sugar.

Therapeutic action of the ingredients is as under :—

Palta (*Stereospermum*)—Antacid, anti-bilious, carminative, digestive, refrigerant, aphrodisiac, stimulant, febrifuge, vermifuge and expectorant.

Neem Bark (*Azadirachta Indica*)—Cooling, stomachic, astringent, anthelmintic, antiseptic, insecticide and febrifuge. Even European medical authorities eulogise its anti-malarial properties as well as

its effectiveness in the treatment of intermittent fever as Peruvian Bark and Arsenic.

Kismis (*Vitis Vinifera*)—Refrigerant, diuretic, cooling, laxative, expectorant, nutritive, blood purifier. It is useful in bilious fever, bronchitis, catarrh, cough, consumption and Jaundice.

Shyamalata (*Ichnocarpus Frutescens*)—In action it is like Indian Sarsaparilla. It is tonic, alterative, diuretic, blood purifier and diaphoretic. It is useful in simple fever and chronic skin diseases, syphilis, elephantiasis and paralysis.

Triphala (Compounds of Embellic Myrobalan, Terminalia Chebula and Terminalia Bellirica)—Effective aperient, astringent, prabartaka (alterative), anti-bilious, expectorant and antacid. It is efficacious in fever, cough, asthma, piles, worms, rheumatism, urinary diseases, chronic diarrhoea, dyspepsia, flatulence, colic, hiccup, vomiting, ophthalmia etc.

Vasaka Bark (*Adhatoda Vasaka*)—Expectorant, hæmostatic, diuretic, anti-spasmodic. It is useful in hæmorrhage, phthisis, epilepsy, hysteria, insanity, asthma, whooping cough and hæmoptysis.

In *Chaturthaka* fever (Quartan type of fever) :—the following three sorts of decoctions, are very efficacious, viz. (1) Vasadi, (2) Mustadi and (3) Pathyadi.

Vasadi.

R/

- Vasaka Bark (*Adhatoda Vasaka*)
- Amlaki (*Embelica Officinalis*)
- Salpani (*Desmodium gangeticum*)
- Devdaru (*Pinus Deodara*)
- Haritaki (*Myrobalan Chebulic*)
- Sunth (*Zingiber Officinalis*)

Take equal parts of the above, weighing in all 2 tolas and boil these in 1 lb. of water to 4 oz. and administer twice or thrice a day with $\frac{1}{2}$ oz. of honey or sugar.

Therapeutic action of the ingredients is as under :—

Vasaka Bark (*Adhatoda Vasaka*)—Expectorant, diuretic, antispasmodic and hæmostatic. It is useful in hæmorrhage, phthisis, hæmoptysis, epilepsy, hysteria, insanity, asthma, etc.

Amlaki (Embelica Myrobalan)—Laxative, diuretic, refrigerant, vermifuge and expectorant. It is useful in dyspepsia, jaundice, anæmia, biliousness. In ophthalmic diseases, it is used as collyrium with success.

Salpani (Desmodium Gangeticum)—Febrifuge, anti-catarrhal, alterative and bitter-tonic. It is useful in remittent fever, puerperal fever, inflammatory affection in the chest.

Devadaru (Pinus Deodara)—Carminative, astringent, febrifuge. In combination with Bonduct Nut it acts better than Cinchona; useful in remittent type of fever, diarrhœa, dysentery and bilious fever.

Haritaki (Terminalia Chebula)—Effective aperient, astringent, alterative, anti-bilious, expectorant and antacid. It is efficacious in fever, cough, asthma, piles, worms, rheumatism, urinary diseases, diarrhœa, dyspepsia, flatulence, colic, ophthalmia, besides it is insecticide and parasiticide.

Sunth (Zingiber Officinalis)—Aromatic, carminative, stomachic, digestive, stimulant, sialagogue. It promotes secretion of salivary glands and is *slesmanasaka* and anti-catarrhal.

Mustadi.

R/

Mutha (Cyperus Rotundus)

Gulanha (Tinospora Cordifolia)

Amlaki (Embelica Officinalis)

Take equal parts of the above weighing 2 tolas in all; boil these together in 1 lb. of water over a gentle fire and reduce it to 4 oz. To be administered twice a day with honey or sugar.

Therapeutic action of the ingredients is as under :—

Mutha (Cyperus Rotundus)—Diuretic, diaphoretic, astringent, tonic, stimulant, vermifuge, emmenagogue. It is useful in fever and cachexia.

Gulanha (Tinospora Cordifolia)—Anti-periodic, mild diuretic, stomachic, bitter, tonic, anti-bilious, stimulant, alterative and aphrodisiac. It is useful and efficacious in Pitta-azar (bilious fever) as well as in slesmik-azar (catarrhal fever) and urinary diseases. It is more efficacious than Quinine in Malarial fever with or

without enlargement of the spleen. It is invaluable in cachexia after abuse of quinine and anæmia ; very effective in painful urination and diseases of the skin.

Amlaki (*Embelica Myrobalan*)—Laxative, diuretic, refrigerant, expectorant and digestive. It is invaluable in dyspepsia, jaundice, anæmia, biliousness. In ophthalmic diseases, it is used as a collyrium with encouraging result.

Pathadi.

R/

- Haritaki (*Myrobalan Chebulic*)
- Salpani (*Desmodium gangeticum*)
- Sunth (*Zingiber Officinalis*)
- Devdaru (*Pinus Deodara*)
- Amlaki (*Embelica Officinalis*)
- Vasaka Bark (*Adhatoda Vasaka*)

Take equal parts of the above to a total weight of 2 tolas ; boil in 1 lb of water, reduce it to 4 oz., to be given twice a day with sugar and honey.

Therapeutic action of the ingredients is as under :—

Haritaki (*Terminalia Chebula*)—Effective purgative, astringent, alterative, anti-bilious, expectorant, antacid and digestive. It is efficacious in fever, cough, asthma, piles, worms, rheumatism, urinary diseases, diarrhœa, dyspepsia, flatulence, colic, ophthalmia. Besides it is antiseptic, insecticide and parasiticide.

Salpani (*Desmodium Gangeticum*)—Febrifuge, anti-catarrhal and alterative, bitter, tonic. It is indicated in remittent type of fever, puerperal fever, inflammatory affection in the chest,

Sunth (*Zingiber Officinalis*)—Aromatic, carminative, stomachic, digestive, stimulant, sialogogue. It promotes secretion of the salivary glands and is anti-catarrhal.

Devadaru (*Pinus Deodara*)—Carminative, astringent, febrifuge. It produces the action of the Peruvian bark when employed in combination with Bonduct Nut (*Nataphal*). It is prescribed in remittent type of fever, diarrhœa, dysentery as well as in bilious fever.

Amlaki (*Embelica Myrobalan*)—Laxative, diuretic, refrigerant, expectorant and digestive. It is invaluable in

dyspepsia, jaundice, anæmia and biliousness. In ophthalmic diseases it is prescribed as a collyrium.

Vasaka Bark (*Adhatoda Vasaka*)—Expectorant, diuretic, anti-catarrhal, anti-spasmodic and hæmostatic. It is efficacious in hæmorrhage, phthisis, hæmoptysis, epilepsy, hysteria, insanity, asthma and in catarrhal condition of the lungs.

Jwarantaka Rasa is widely used in various types of fever specially where Kapha and Vayu systems are deranged. The recipes of the preparation are as under :—

भास्करो गन्धकः सर्वो देवो बिहङ्ग तीक्ष्णकम्
शोणितं गगनश्चैव पुष्पकञ्च महेश्वरम्
भूनिम्बादि गणैर्भाव्यं मधुना गुड़िका दृढा
चातुर्यकं तृतीयञ्च ज्वरं सन्ततकं तथा—
आमज्वरं भुतकृतं सर्वज्वरमपोहति ॥

R/.

Reduced Tamra (Cuprum).

Purified Paradam (Hydrargyrum).

„ Gandhakam (Sulphur).

„ Saurastra mrittika.

„ Swarna makshika (Ferri sulphuretum).

Reduced Lauham (Ferrum).

Purified Hingula (Realgar).

Reduced Abhrakam (Mica).

Purified Rasanjan (Antimony).

Reduced Gold (Aurum).

Take equal parts of each of the ingredients and rub in mortar and thereafter when these are well compounded, the decoction prepared with Chirayetta, Devdaru (*Prunus Deodara*), Sunth (*Zingiber Officinalis*), Mustaka (*Cyperus Rotundus*), Katki (Black Hellebore), Indrajab (Kurchi Seed), Dhania (*Coriandar Sativa*), Gajapippuli (*Scindapsus Officinalis*) and Dasamula should be added to it and pestled together to a mass. The rubbing should be done at least for 24 hours, as the process of continuous rubbing considerably enhances the potency of the medicine.

The medicine is prescribed in honey only. The preparation would be advantageously prescribed in *Tritiyaka* and *Chaturthaka* fevers and in fevers from mental shock or depression etc. It would give better result if the patient complains of

weakness, nervous prostration, and pains in body which he would generally find difficult to locate to a particular spot on the body as well as in symptoms leading to predominance of *Kapha* and *Vayu*.

The medicine is advisable to be employed during remission.

The therapeutic action of the ingredients have already been described elsewhere.

(To be continued.)

GYNÆCOLOGY, OBSTETRICS, AND PEDIATRICS OF THE AYURVEDISTS

BY

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(Continued from our last issue)

Local treatment :—(1) foment the part ; (2) give enema of milk boiled with decoction of drugs of the Ten Roots group ; (3) a rectal enema of oil cooked with *Convolvulus turpethum* ; (4) also a vaginal douche of (3) (Ch.).

Udavarta mentioned above is only one of the varieties peculiar to women ; there are fourteen other different types of this disease, each of which is brought on by repression of a particular natural urging of the body, viz., (1) flatus, (2) evacuation of bowels, (3) micturation, (4) vomiting, (5) eructation, (6) lachrymation, (7) yawning, (8) sneezing, (9) discharge of Semen, (10) hunger, (11) thirst, (12) respiration, (13) sleep, and (14) incidental to the habitual use of unwholesome food and drink (*Apathyaja*).

The *Symptoms* of each of the above are due to the derangement and incarceration of the five *Vayus* in the body, and are peculiar to each repression (Su.).

General Treatment :—Restore the deranged *Vayu* to its proper course and direction (Su.).

(III) *ANTARMUKHI* (Retroversion of the Uterus):—Indulgence in sexual intercourse after a heavy meal and in an unusual position

provokes *Vayu* and twists the mouth of the uterus; there are severe pains in bones, muscles, and vagina; the patient does not like coitus (Ch.).

(IV) *PARIPLUTA* (*Vaginismus*, *Vulvitis*, *Vaginitis*):—There is excessive local pain during the sexual act, there is aching and piercing pain in the genital organs (Su.). Suppression of natural urgings, of sneezing, eructation, etc. during coitus by a woman, who is prone to derangements of *Pitta*, causes *Pitta* to overwhelm *Vayu*; and both of them vitiate the organ afterwards; there is inflammation, tenderness of touch, fever, blue or yellowish discharge accompanied by shooting pain, and pain in hips, waist, groin, and the back (Ch.). There is diarrhœa, loss of appetite, fever, and heavy sensation in the hypogastrium and the sides (Va.).

(V) *UPAPLUTA-YONI*; *SYN*:—*Apluta-Yoni* (*Leucorrhœa* due to *anæmia*):—Excessive indulgence in food and drink, and suppression of natural urgings like breathing, vomiting, etc. aggravate *Kapha*; the *Vayu* which is deranged in an enciente drives *Kapha* into the genital organs; both of them now vitiate these organs; there is a pale whitish or white discharge; or lumps of mucus are passed (Ch.). Treat as for *Vamini-Yoni* (No. XV) with oleaginous treatment, fomentations, emetics, etc.; insert in the vagina cotton swabs soaked in oil and ghee (Ch.).

(VI) *VIPLUTA* (*Vaginitis*, *Vulvitis*, *Leucorrhœa*, *Pruritis* of the Vagina):—There is constant local pain, aching, and piercing pains (Su.).

It appears that *Vipluta-Yoni* is the same as *Acharana-Yoni* (No. XX) (unfit for sexual intercourse), *Uttana-Yoni* (gaping), or *Unnata-Yoni* (raised, inflamed, afflicted with ulcers and piercing pains); in *Vipluta-Yoni* there is pruritis due to uncleanness (Ch.).

General Treatment:—(1) Give powders of fruits of *Piper longum* and *Terminalia Chebula*, iron 'Bhasma' mixed with honey every day; (2) cook 80 parts of oil with 160 parts each of goat's milk and urine, one part of *Woodfordia floribunda* flowers, *Phyllanthus Embelica* leaves, *Cinnamomum Tamala*, *Nymphaea stellata*, *Eugenia Jambolana* seeds, *Mangifera indica* seed, *Symplocos racemosa*, *Myrica nagi*, *Diospyros glutinosa*, *Punica granatum*, dried green fruit of *Ficus glomerata*, antimony powders, liquorice, crude iron-sulphate and alum; soak cottonswabs in this oil and insert in the vagina; rub it on the waist, back, and the sacral region, and give an enema of the same; it cures slimy discharges,

bloody discharges, pruritis of *Vipluta*—, *Upopluta*—, *Uttana*—, and *Unnata-Yonis* (Ch.).

Local Treatment:—To stop the discharge, wash the vagina with equal parts of raisin, wine, wine of *Saccharum officinarum*, 'Sukta' wine, and decoction of shoots of young *Bambusa arundinacea*, *Conocarpus latifolia*, *Melia Azadirachta* bark, *Calotropis gigantea* bark, *Piper auranticum*, *Mangifera indica* seed, *Eugenia Jambolana*, *Rubia cordifolia*, and root of *Adhatoda Vasica*; (2) insert cottonswabs in oil cooked with the decoction of *Vangueria spinosa*, *Rubia cordifolia*, *Eugenia Jambolana*, *Conocarpus latifolia* and the barks of milky-juice yielding trees, e.g., *Mangifera indica*, *Spondias mangifera*, *Ægle Marmelos*, *Feronia elephantum*, etc. (Ch.).

(VII) VANDHYA-YONI, *Shushka-Yoni* (Ad.) (Sterility):—There is suppression of 'Menstrual' Fluid, aching, and piercing pains; short-lived children occur in women who remain sterile (*Nivrita-Prasava*) for six years (or five years according to some) after a previous child-birth (Su.) An injury to the channels which carry 'Menstrual Fluid' brings on sterility, suppression of the menses, and incapacity of sexual intercourse (Su.).

General Treatment:—Take two parts honey, four parts ghee, one part of mixture of sugar, *Vitis vinifera* dried fruits, *Mucuna pruriens*, *Piper longum* and 'ikshuraka'; give one ounce followed by draughts of milk; it is an excellent blood purifier; sterility, uterine and vaginal complaints are removed (Su.).

Harita describes six kinds of natural, or absolute and acquired 'Sterility':—

(a) Extremely young age of the girl; if there is sexual intercourse with a girl who has not menstruated, then the mouth of the uterus contracts, and the woman becomes sterile, or conception occurs with difficulty.

(b) *Kaka-vandhya*.—On account of injury or mal-development of the uterus in childhood, conception never occurs; this condition is amenable to treatment.

(c) *Anaptya*.—This is due to loss, diminution, or absence of 'Menstrual Fluid' in the system of the woman; no conception occurs; this is amenable to treatment.

(d) *Garbhasravi*.—This is due to successive abortions.

(e) *Mrita-vatsa*.—This is due to successive miscarriages.

(f) *Loss of Vitality*.—Of the mother (Harita).

Harita also describes the following three varieties due to derangement of 'Menstrual Fluid' :—

(g) *Sterility due to derangement of the 'Menstrual Fluid' by Pitta.*—The 'Menstrual Fluid' is red like the flower of *Carthamus tinctorius*; there is burning, thirst, and strangury. *Treatment* :—(1) give with milk *Santalum album*, *Andropogon muricatus*, *Rubia cordifolia*, *Trichosanthes cucumerina*, *Cyperus rotundus*, *Bassia longifolia*, *Pterocarpus santalinum*, *Hemidesmus indicus*, *Cuminum Cyminum*, *Nelumbium speciosum*, liquorice, and sugar; (2) give with milk *Santalum album*, *Andropogon muricatus*, *Rubia cordifolia*, *Clitoria Ternatea*, and ghee; (3) give with cow's milk *Clitoria Ternatea* root, or *Cassia Fistula* root; (Harita).

(h) *Sterility due to derangement of the 'Menstrual Fluid' by Kapha.*—There is heavy, slimy, thick discharge which obstructs the passage of urine; there is tired feeling and drowsiness. *Treatment* :—Give with milk the three myrobalans, *Clitoria Ternatea*, *Cassia Fistula*, *Holarrhena antidysenterica* bark, and curds (Harita).

(i) *Sterility due to derangement of the 'Menstrual Fluid' by the three Humours.*—*Treatment* :—(1) give for one month decoction of white *Clitoria Ternatea*, white *Abrus precatorius*, and *Boerhaavia diffusa*; (2) give decoction of *Piper longum*, *Cyperus rotundus*, *Fagonia arabica*, *Solanum indicum*, *S. xanthocarpum*, and *Steriospermum chelonoides*, with curd and sugar for seven days during the menstrual period; and when the Fluid is pure, give the decoction with milk to help conception (Harita).

(VIII) *SHUSHKA-YONI* :—*Vayu* aggravated by the suppression of natural urgings like sneezing, urination, etc., at the time of sexual act, or at the time of menstrual period (Va.), produces constipation, retention of urine, and dries the mouth of the organ (Ch.). There is extreme pain (Va.).

Local Treatment :—Give vaginal douche of suitable oil.

(To be continued).

Reports of Societies.

—:o:—

GOVERNMENT OF MADRAS. LOCAL SELF-GOVERNMENT DEPARTMENT (Public Health)

G. O. No. 231, P. H., 1st February 1933

Indian Medical School—Rules for the registration of practitioners of Indian medicine—Approved.

READ—the following paper :—

From the Principal, Indian Medical School, dated 7th May 1932, No. 1759. *Order—No. 231, P.H Dated 1st February 1933.*

The rules framed for the registration of practitioners of Indian medicine are approved as shown in the annexure to this order.

2. With reference to paragraph 2 of G.O. No. 2228, P.H., dated 26th October 1932, the Government have decided that no change need be made in the existing orders relating to the acceptance of medical certificates granted by practitioners of Indian medicine.

(By order of the Government, Ministry of Local Self-Government)

S. G. SENGODAIYAN,

Deputy Secretary to Government.

To the Principal, Indian Medical School.

- „ the President, Central Board of Indian Medicine.
- „ the Surgeon-General.
- „ the Director of Public Health.
- „ the Chemical Examiner.
- „ the Director of Town-Planning.
- „ the Inspector of Municipal Councils and Local Boards.
- „ the Accountant-General (with a copy of G.O. No. 2228, P.H., dated 26th October 1932).
- „ the Examiner of Local Fund Accounts (with a copy of G.O. No. 2228, P.H., dated 26th October 1932).
- „ the Public (Police) Department.
- „ the Law (General) Department.
- „ all other departments of the Secretariat (all sections).
- „ all Presidents of District Boards (with a copy of G.O. No. 2228, P.H., dated 26th October 1932).
- „ all Presidents of Taluk Boards (with a copy of G.O. No. 2228, P.H., dated 26th October 1932).
- „ all Chairmen of Municipal Councils (with a copy of G.O. No. 2228, P.H., dated 26th October 1932).

„ all Presidents of Village Panchayats (with a copy of G.O. No. 2228, P.H., dated 26th October 1932).

ANNEXURE.

RULES FOR THE REGISTRATION OF PRACTITIONERS OF INDIAN MEDICINE.

Section I.

1. Persons possessing any of the following qualifications shall be eligible for registration :—

(i) Diplomas in Indian Medicine granted by the Board of Examiners in Indian Medicine appointed by the Government of Madras.

(ii) Diplomas in Indian Medicine granted by or under the authority of the Government of India or a Provincial Government or an Indian State or by any recognized University or Examining body of India provided that applications for the recognition of such diplomas are recommended by the Central Board of Indian Medicine, Madras, and accepted by the Government of Madras.

(iii) Holders of Government titles of professional eminence like Vaidya Ratna and Shifa-ul-Mulk.

(iv) Other practitioners of Indian medicine who do not hold any of the qualifications noted above but are granted special recognition by the Government of Madras on their applications being recommended by the Central Board of Indian Medicine.

Proviso.—Notwithstanding anything contained in these rules, it shall be competent for the Central Board of Indian Medicine to Register, during the period of the first five years from 1st February 1933 any person who is proved to the satisfaction of the Board to be an eminent practitioner of Indian medicine of not less than ten years' standing.

2. Practitioners registered under these rules shall be divided into two classes as noted below :—

Class A.—Practitioners whose qualifications denote at least a minimum standard of professional training for undertaking medical, surgical (including obstetrical) and medico-legal work.

Class B.—Practitioners whose qualifications denote at least a minimum standard of professional training for undertaking medical work only.

3. Except with the special sanction of the Government, no one other than a practitioner of Indian medicine registered under these rules, shall be competent to hold any appointment as medical officer in any institution of Indian medicine maintained or aided by the Government or a local body or both.

4. The registration of applicants under sub-rule (iv) of rule 1 above shall be subject to the condition that the applicant gives proof to the satisfaction of the Board that he has been a practitioner of not less than

ten years' standing except where the Board decide otherwise, and that he has undergone adequate professional training—both theoretical and practical—for a period of not less than four years before the commencement of his practice.

5. The following rules shall govern applications for registration under sub-rule (iv) of rule 1 above :—

(a) All applications shall be sent through a local association of practitioners of Indian medicine if there is one in the locality.

(b) All applications received shall first be considered by a standing sub-committee constituted for the purpose consisting of seven members elected by the Board, of whom not less than five shall be from among city members of the Board with the President of the Board as ex-officio member and chairman of the sub-committee. In the absence of the President, the sub-committee shall elect one of their members as chairman. The sub-committee shall ordinarily meet during the time of the meetings of the Central Board of Indian Medicine.

(c) All applications received from a district in the mufassal where a member of the Board permanently resides shall be referred to that member for remarks before the same is considered by the standing sub-committee.

6. (a) Every person who applies to be registered under these rules shall pay a registration fee of fifteen rupees and a stamp duty of annas twelve.

(b) This rule shall not apply to any person whose name has been registered under any Act or rule for the registration of practitioners of Indian medicine for the time being in force in any part of British India, if the said Act or rule provides for the registration of persons registered under these rules without the payment of any fee.

7. The Local Government may either *suo moto* or otherwise revise any order passed by the Board under the rules in this section.

Section II.

8. The following rules shall regulate the procedure to be adopted for revoking or cancelling the registration of those who abuse the privilege of registration.

RULES GOVERNING ENQUIRIES BY THE CENTRAL BOARD OF INDIAN MEDICINE, MADRAS, OR A COMMITTEE THEREOF.

(i) The Board may refuse to permit the registration of any person who has been convicted of any such offence as implies, in the opinion of the Board, a defect of character, or who, after an enquiry at which an opportunity has been given to the candidate to be heard in person or by pleader, has been guilty of professional misconduct.

(ii) The Board may, if it sees fit, and after giving due notice to the person concerned and inquiring into his objections, if any, order that any entry in the register which shall be proved to the satisfaction of the Board to have been fraudulently or incorrectly made or brought about, be cancelled or amended.

(iii) The Board may, after holding an enquiry at which an opportunity has been given to the person concerned to be heard in person or by pleader, direct the removal altogether or for a special period, from the register of the name of any registered practitioner, for the same reasons for which registration may be refused by the Board under section (i) above. The Board may also direct that any name so removed shall be restored.

(iv) An enquiry under the above rules may be held by a Committee consisting of five members of the Board elected for the purpose by the Board. The Board or the Committee, as the case may be, may, at its discretion hold such an enquiry *in camera*. The decision of the Committee shall be deemed to be the decision of the Board.

(v) An appeal shall lie to the Local Government against every decision of the Board under rules (i) to (iv) above. Such appeal shall be preferred within three months from the date of the Board's decision. The Local Government may *suo moto* revise any other passed by the Board or the Committee as the case may be under rules (i) to (iv) above.

(vi) Whenever information is received that a medical practitioner who is an applicant for registration, or whose name has already been registered has been guilty of conduct which *prima facie* constitutes professional misconduct, the Secretary shall make an abstract of such information.

(vii) Where the information in question is in the nature of a complaint by a person or body charging a medical practitioner with professional misconduct, such complaint shall be made in writing addressed to the Secretary, and shall state the grounds of complaint and shall be accompanied by one or more declarations as to the facts of the case.

(viii) Every declaration must state the description and true place of abode of the declarant; and where the facts stated in a declaration are not within the personal knowledge of the declarant, the source of the information and grounds for the belief of the declarant in its truth must be accurately and fully stated.

(ix) (a) The abstract and, where a complaint has been lodged, the complaint, and all other documents bearing on the case, shall be submitted by the Secretary to the President, who may, if he thinks fit, instruct the Secretary to furnish the medical practitioner concerned with a copy of the complaint and other documents and invite him by means

of a registered letter to submit any explanation he may have to offer. The documents, including any explanation submitted by the practitioner to the Secretary, shall then be placed before the Board.

The Board may then—

(1) order that all further proceedings be stopped ; or

(2) appoint a Committee to consider the matter and submit a report to the Board as to whether proceedings should be instituted under rules (i) to (iii) above ; or

(3) direct that a regular inquiry be held by the Board or a Committee thereof appointed under rule (iv) above.

A committee appointed to make a preliminary inquiry shall have power to cause further investigation to be made and further evidence to be taken and to take any legal advice or procure any legal assistance it may think necessary. The Committee shall report to the Board.

(b) If the Board consider that the case is one in which an inquiry under rule (i) or rule (ii) or rule (iii) above ought to be held, the Presidents shall direct the Secretary to take steps for the institution of any inquiry and for having the case heard and determined by the Board.

(x) The Board or Committee thereof appointed under rule (iv) above shall observe in inquiries held by them the procedure laid down in the following rules—

(xi) When the charge is brought by a complainant, they shall require the complaint to be reduced to writing and accepted by the complainant. The articles of charge and a list of documents and witnesses by which each charge is to be sustained shall then be prepared and the Secretary shall issue a notice in writing on behalf of the Board addressed to the medical practitioner concerned. Such notice shall be accompanied by a copy of the articles of charge and list of witness and documents referred to above and shall inform the medical practitioner concerned, of the day on which and hour at which the Board or Committee intend to deal with the case and shall call upon him to attend before the Board or Committee on that day and hour. The notice shall be in the form appended to these rules, with such variations as circumstances may require. It shall be served on the medical practitioner fifteen clear days before the beginning of the enquiry and shall be accompanied by a copy of rules (i), (ii), (iii) and (iv) above and of the rules to regulate the procedure for conducting any inquiry referred to in those rules. Service of the notice may be made either by delivery to the medical practitioner in person or by registered letter addressed to his usual residence.

(xii) In every case in which the Board resolve that an inquiry shall be instituted and notice of inquiry is issued accordingly, the complainant (if any) and the medical practitioner concerned shall, upon request in

writing signed by the party or his pleader, be entitled to be supplied by the Secretary with a copy of any declaration, explanation, answer or other document given or sent to the Board by or on behalf of the other party, which such other party will be entitled on proper proof to use at the hearing as evidence in support of, or in answer to, the charge specified in the notice of inquiry.

(xiii) Any answer, evinence, or statement forwarded, or application made by the medical practitioner between the date of the issue of the notice and the day named for the hearing of the charge, shall be dealt with by the President in such manner as he shall think fit.

(xiv) Copies of all material documents which are laid before the Board or Committee as evidence in regard to the case shall be made and furnished to each member of the Board or Committee as the case may be, before the hearing of the case.

(xv) At the hearing of the case by the Board or Committee, the complainant and also the medical practitioner concerned may, if they so desire, be represented or assisted by pleaders.

(xvi) When the complainant appears personally or by pleader, the order of procedure shall be as follows :—

(a) The complainant shall exhibit the articles of charge to the Board or Committee, which shall he openly read.

(b) The medical practitioner concerned shall then be called upon to plead 'guilty' or 'not guilty' to each of them, which plea shall forthwith be recorded with the articles of charge. If the medical practitioner refuses or without reasonable cause neglects to appear to answer the charge either personally or by pleader, he shall be taken to admit the truth of the articles of charge.

(c) The complainant may then address the Board or Committee in explanation of the articles of charge and of the evidence by which they are proved.

(d) The oral and documentary evidence shall then be exhibited. The witnesses shall be examined by or on behalf of the complainant and may be cross-examined by or on behalf of the medical practitioner concerned. The complainant shall then be entitled to re-examine the witnesses on any point on which they have been cross-examined. No questions should be asked in re-examination on any new matter without leave of the Board. The Board or Committee may put such questions as they think fit.

(e) If, before the close of the case for the complainant, it shall appear necessary, the Board or Committee may, in their discretion, allow the complainant to exhibit evidence not included in the list furnished to the medical practitioner concerned or may themselves call for new evidence, and in such case the medical practitioner shall be

entitled to have, if he demands it, an adjournment of the proceedings for three clear days, before the exhibition of such new evidence, exclusive of the day of adjournment and of the day to which the proceedings are adjourned.

(f) When the case for the complainant is closed, the medical practitioner concerned shall be required to make his defence, orally or in writing, as he shall prefer. If made in writing, it shall be openly read and a copy shall be given at the same time to the complainant.

(g) The evidence for the defence shall then be exhibited, and the witnesses examined, who shall be liable to cross-examination and re-examination and to examination by the Board or Committee in the same manner as the witnesses for the complainant.

(h) The Board or Committee or some persons appointed by them shall take notes in English of all the oral evidence, which shall be read aloud to each witness by whom the same was given, and if necessary explained to him in the language in which it was given, and shall be recorded with the proceedings.

(i) If the medical practitioner concerned makes only an oral defence and exhibits no evidence, the inquiry shall end with his defence. If he records a written defence or exhibits evidence, the complainant shall be entitled to a general oral reply on the whole case, and may also exhibit evidence to contradict any evidence exhibited for the defence, in which case the medical practitioner concerned shall not be entitled to any adjournment of the proceedings, although such new evidence were not included in the list furnished to him.

(j) When the Board or Committee shall be of opinion that the articles of charge, or any of them, are not drawn with sufficient clearness and precision, the Board or Committee may, in their discretion, require the same to be amended, and may thereupon, on the application of the complainant or the medical practitioner concerned, adjourn the inquiry for such time as they may consider reasonable. The Board or Committee may also, if they think fit, adjourn from time to time, on the application of either the complainant or the medical practitioner concerned, on the ground of sickness or unavoidable absence of any witness or such other cause as they may consider reasonable. When such application is made and refused, the Board or Committee shall record the application and their reasons for refusing to comply with it.

(xvii) (u) When there is no complainant, or no complainant appears, the proceedings shall begin by the Secretary reading to the Board the notice of inquiry addressed to the medical practitioner concerned and the articles of charge and stating the evidence by which the articles of charge are supported.

(b) The medical practitioner shall then be called upon to plead 'guilty' or 'not guilty.' The further proceedings shall be conducted in substantial accordance with the procedure laid down in rule (xvi) above.

(xviii) The Board or Committee may, at their discretion, hold the inquiry *in camera*.

(xix) (a) Upon the conclusion of the case, the Board or Committee will deliberate thereon in private, and at the conclusion of the deliberations the Board or Committee shall vote on the question whether the articles of charge are proved or not and whether they show that the medical practitioner concerned has been guilty of professional misconduct or not.

(b) If the Board or Committee by a majority find the medical practitioner guilty of professional misconduct, the President shall direct the Secretary not to register his name if he be an applicant for registration, or to erase his name altogether or for a specified period from the register of medical practitioners if he is already a registered practitioner, except in cases where the Board or Committee consider that in view of extenuating circumstances the practitioner may be let off with a warning.

(xx) When the registration of the name of any medical practitioner is refused or when the name of any registered medical practitioner is removed from the register in accordance with the provisions of the preceding rules, the Secretary shall forthwith send notice of such refusal or removal to the medical practitioner concerned, and such notice shall be sent by a registered letter addressed to his last known address. The Secretary shall also send forthwith intimation of any such refusal or removal to the body or bodies from whom the medical practitioner received his qualification or qualifications and shall request them not to admit him to any examination for any new qualification which is registerable in the register of registered practitioners without previous reference to the Board.

Notice.

SIR,

On behalf of the Central Board of Indian Medicine, Madras, I give you notice that information and evidence have been laid before the Board by which the complainant makes the following charge or charges against you, namely (here set out the circumstances briefly) and that you have thereby been guilty of professional misconduct.

And I am directed further to give you notice that on the day of 19 a meeting of the Board will be held at o'clock in the to consider the above-mentioned charge or charges against you and decide whether or not they

should direct that your name shall not be registered in the register of
be removed from
 registered practitioners pursuant to rule (xix) of the rules governing inquiries by the Central Board of Indian Medicine or a Committee thereof. You are invited and required to attend in person or by pleader before the Board at the abovenamed place and time, to establish any denial or defence that you may have to make to the abovementioned charges; and you are hereby informed that, if you do not attend as required, the Board may proceed to hear and decide upon the said charges in your absence.

Any reply or other communication or application which you may desire to make respecting the said charges or your defence thereto should be addressed to the Secretary to the Central Board of Indian Medicine and transmitted so as to reach him not less than three clear days before the day appointed for the hearing of the case.

A copy of the rules governing inquiries by the Central Board of Indian Medicine, Madras, or a Committee thereof is enclosed herewith for your information.

A copy of the articles of the charge and of list of documents and witnesses by which each charge is to be sustained are attached.

Notices of Drugs.

—:o:—

(4) DIE MEDIZINISCHE WELT,

Dr. Georg Zachariæ,

"Therapie der rheumatischen Erkrankungen,"

(Therapy of the rheumatic diseases.)

The author gives the following classification of the rheumatic conditions: (1) Inflammatory conditions of muscles, including Myalgia. (2) Rheumatic affection of nerves, especially the neuralgias and sciatica. (3) Acute rheumatic joint lesions. (4) Chronic diseases of joints. For all these conditions he contends that the primary and essential feature of the treatment should be hot brine baths, preferably sulphurous, at a temperature of 103° F. The chemical dissociation of the salts which occurs allows the free ions to penetrate the skin. After the baths it is essential that the affected parts should be covered with Antiphlogistine. There is a definitive lowering of blood sugar after the baths, and the blood pressure also falls in consequence of an exertion of histamine bodies by the skin. Precautions must therefore be taken against collapse. As accessory measure, mineral water of the Kaiser-Friedrich-Quelle are given the patient to drink daily. Besides other cases, 79% of 124 cases of chronic infective poly-arthritis were cured.

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LATE DESHAPRIYA JOTINDRA MOHON

It is with a heart surfeited with grief and sorrow that we are doing the painful task of announcing the passing away of our beloved leader Deshapriya Jotindra Mohon Sen Gupta.

Only the other day, Bengal lost two of her illustrious sons, we mean late Sir Ashutosh, the Bengal tiger, and Deshabandu Chittaranjan, but still the nation did not feel hopeless, as it found in the late hero a worthy successor of Deshabandhu. But the present bereavement has rendered the Province leaderless and none can tell what is in store for us in the near future. The loss Bengal has suffered by the death of Deshapriya is really not to be compensated and a shadow of despair and hopelessness looms large before the eyes of every body having a slightest concern for the welfare of his motherland.

Jotindra Mohon was born on February 2, in the year 1885, the year in which Indian National Congress was inaugurated, at a village named Barama in the sea-grit mountainous district of Chittagong. His father, late Jatra Mohon Sen Gupta, was a prominent law-yer of his days and a political leader of no mean repute and, as such, Jotindra Mohon was brought up in an atmosphere of "service before self" and ardent patriotism. He was educated in India in the Brahma boys school, the Chittagong Collegiate School, South Suburban School, Hare School and the Presidency College. In August 1904, he sailed for England and entered the Downing College, Cambridge in 1907. He obtained his B. A. and LL. B. degrees from this College in 1908 and 1909 respectively. He was the President of the "Indian Majlis" and the "East and West Society" of the College during his brief connection therewith. As a member of the Gray's Inn, he was called to the Bar in June 1909. In the last year of his stay in England, he married an English lady, Nellie Grey, who,

with all that is best in the English, has identified herself with the cause of India and thus proved herself worthy of her illustrious husband.

Deshapriya Sen Gupta joined the Calcutta High Court in 1910 and built up his practice slowly but steadily. But his interest in politics was there, even from the very year he returned to India from England, and attended the Faridpur Political conference in 1911 and invited the next Session to Chittagong. His father, Mr. Jatra Mohon, acted there as the Chairman of the Reception Committee and the conference was a complete success. In 1919, when the Bengal Provincial conference met at Mymensing under the presidentship of Deshapriya's father, the son read the presidential address on behalf of the father. It was here that Mr. Sen Gupta stood by the side of Deshabandhu Das when the latter moved a resolution, against great opposition, in support of the *satyagraha* movement inaugurated by Mahatma Gandhi.

When the great non-co-operation movement was introduced, Jotindra Mohon responded to the call of the saint of Sabarmati with an indifference to all worldly concerns which amazed even his enemies. By that time he had built up, quite patiently, a good position at the Bar and was enjoying a lucrative practice. But he left all behind and courted a life of privation and hardship with his wife and children. He was, however, prevailed upon, later on, to resume his practice but except in the famous Bawla murder case he never took to the profession seriously. In fact, politics engrossed his entire attention and left very little time for other works.

Deshapriya's first political fight was fought at his native place, Chittagong. In April, 1921 he organised and led the strike of the Employees of the Burma Oil Company in Chittagong. A notice under section 144 was served on him and on his refusal to obey the magestrical order, he was arrested, which was, however, followed by a complete dislocation of business in Chittagong and an amicable settlement of the strike quickly followed. On the 28th May, 1921, Mr. Sen Gupta led and organised another strike, known to us as the famous A. B. Railway strike, involving about 14,000 employees of the Railway. The strike lasted for over three months and he had to borrow Rs. 40,000 on his own responsibility in order to feed those unemployed strikers during the strike. In this

case also he was arrested and sent to "hajrat" and a settlement was arrived at amicably. From now onward his life was a series of arrests, detentions and imprisonments.

In 1922, Mr. Sen Gupta acted as Chairman of the Reception Committee of Bengal Provincial conference, presided over by Srijukta Basanti Devi. What with his sacrifices and what with his burning and selfless love for the country, Mr. Sen Gupta soon came to occupy a very prominent position in the affairs of the Indian National Congress and became a member of the working committee of this organisation in 1922. When Deshabandhu formed the Swarajya Party, he joined it as his worthy lieutenant and became the Secretary of the Bengal Swarajya Council Party.

With the death of Deshabandhu in 1925, his mantle fell on Jotindra Mohon and Mahatma Gandhi, on careful consideration of the political situation then obtaining in Bengal, put the "Tripple crown" on the modest brow of Jotindra Mohon who succeeded Chittaranjan in the Presidency of the Bengal Provincial Congress Committee, the leadership of the Swarajya Party and the Mayoralty of Calcutta. Mr. Sen Gupta performed all these three duties with courage, ability and tact. He was elected Mayor of Calcutta for five successive years, a record unparalleled in the history of the present reformed Corporation. His last election as Mayor of the City of Calcutta was while he was in goal and as he could not take the oath within the prescribed period, he could not take his seat, though elected.

Early in 1930, Sen Gupta's blood pressure suddenly went up and he undertook a sea-voyage, in course of which he addressed some public meetings at Rangoon for which he was sent to the prison for 10 days. In the same year, in April, he was again arrested and convicted at Calcutta and Amritsar for various terms and was released ultimately on January 27, 1931 as a result of the Gandhi-Irwin Pact.

Repeated incarcerations by this time had greatly told on Mr. Sen Gupta's health and he was now completely a victim to that malady called "Blood-Pressure." He sailed to Europe on medical advice to recoup his health in October, 1931 and in spite of his delicate health,

addressed several public meetings in England urging India's claim to Self-Government.

He came back to India on the 20th of January, 1932 but was arrested on board the ship under Regulation III of 1818 and sent to the Darjeeling Jail as a state prisoner. His old malady reappeared here and he was removed to Jalpaiguri jail with worse results. He was admitted as a patient into the Calcutta Medical College Hospital by the end of the year. Here also the treatment did him no good.

On the 4th of June last, he was transferred to Ranchi where he was allowed to stay with his family in a *bangalow* with his family under police guard. Here the end came suddenly on the 23rd of July at about 8-30 p. m. as a result of an Apoplexy stroke due to High Blood Pressure. Thus came the end of the life of a great national leader, a great friend of the poor and destitute and a great lover of the poor motherland.

It is useless trying now to judge the merits of such a great soul and the matter may best be left to the history. That Sen Gupta was great, no body will deny, and if patriotism is a virtue, he was greatly virtuous, inspite of the fact that there are men belonging to other schools of thought whose view regarding politics may differ from that of Deshapriya. If self-less love, charity, courage and honesty be the criterion of greatness, then Sen-Gupta was certainly greater than many of the so-called great.

Deshapriya leaves behind him his widowed wife and two sons. We convey our heart-felt condolence to them.

May his soul rest in peace !

H. N. C.

HEDYOTIS AURICULARIA

IN

COLITIS

AND

CHOLERA ASIATICA.

 BY CAPT. P. R. BHANDARKAR, L. M. & S.

What I am going to place before you may seem to be wanting in scientific exactness of detail, yet, I trust the clinical results obtained from the use of this plant, new to Pharmacopœia, will stimulate further interest in assessing the medicinal virtues of this wild growing plant—*Hedyotis auricularia*—in combating the wilder and dread disease of cholera asiatica.

This tropical plant, identified as *Hedyotis auricularia*, Linn N. O. Rubiaceae, is described as "prostrate, slightly hairy, leaves lanceolate or ovate, strongly nerved below, stipules membranous, edged with long hairs, flowers small, white, sessile, with short broad tube, capsule very small, crowned by the calyx segments."

It grows wild on the road side, along the hedges, also on the ridges between paddy fields and open spaces of the wet lands of the Western Ghat throughout the length of the Indian Peninsula along its west coast from the Konkan southward to Cape Comorin, extending into Ceylon. It is met with in other parts of India with a heavy rainfall, such as Nepal, Sikkim, The Khasia Hills (4000 to 6000 feet altitude), Chittagong and Eastern Bengal. It grows in the Malay Peninsula and Archipelago, also in South China, the Philippines and Australia.

The vernacular names of *Hedyotis auricularia* are *gooke* (Nepalese), *muttia-lata* (Bengali), *gaimaril* (Marathi), *Kudal churiki* (Malayalam), *nela-nekkare* (Kanarese and Tulu), *Bhooyanankeri* (Konkani), *geta-kola* (Sinhalese), and *mariguti*, *kenika* or *kerukah batu* (Malayan).

There is no mention of this plant in Watts' Dictionary of the Economic Products of India. The only reference to its use in literature is that the inhabitants of Sikkim eat its leaves, finely cut and boiled with rice. But it seems probable that its medicinal properties were known in some degree, for, the Malayalam name

kudab churuki literally means 'bowel astringent' and its Ceylonese name *geta -kola* is said to mean 'health-giver.'

Its value in keeping the long digestive tract healthy seems to have been known in parts of Southern India and Ceylon. Here a *chutney* or *mellung* (Sinhalese) of fresh green leaves or a decoction of the whole plant, alone or with other drugs, has been used as a household remedy in digestive troubles and bowel complaints. At the beginning of the monsoon, it is the custom in South Kanara (at least three or four times as a matter of routine) either to cook the leaves with rice *conjee* or make a vegetable soup from the plant. I am of opinion that the custom should have begun centuries ago from a knowledge of the medicinal as well as the prophylactic efficacy of the drug in bowel complaints, though, today, every consumer of the plant may not be aware of its medicinal efficacy.

A couple of cases of chronic relapsing colitis, where pharmacopial remedies had failed to impress, were successfully treated by a villager in South Kanara with a simple chutney administered with daily meals. With this villager, strangely enough, his knowledge was not a closely guarded secret. He disclosed the identity of the ingredients to be '*nela nekkare*' leaves, ground fine with omam and cummin seeds. So it was used by me in the same crude form and with success in some obstinate cases of enteritis and colitis where orthodox remedies had failed to give satisfactory results. Later, acute cases of dysentery were treated with equally good results. The results obtained in the cases of entero-colitis treated with the drug have been encouraging and warrant a thorough investigation of the probabilities of this drug in dysenteries and further support is given to this statement by the following remarks :—

Dr. M. L. Kamath, B. A., M. D., Superintendent, Government Royapettah Hospital, Madras, with co-operation of his assistants, mainly, Dr. K. Kanniyappan, L. M. S., and Dr. M. Achutha Nair, L. M. S., has been able to arrive at the following clinical results and writes.

"I know it is very difficult in a civil hospital to gauge the efficacy of any drug in amoebic dysentery. As is well known, patients leave the hospital when the clinical condition improves, so there is no opportunity to hazard any opinion about complete cure, relapse and cyst formation, etc.

With these limitations, I would state the following :—Hedyotis Auricularia Extract, fifteen grains three times a day, was tried in five cases of amoebic dysentery. In four cases, the clinical condition improved and the amoebae disappeared from the motions, in three cases on the fourth day and in the fourth one on the fifth day of the administration. Two of these cases remained in hospital for a further three days, one for a week and one, only for a day, without showing amoebae or cysts in the motions.

One case did not respond to the treatment even when the extract was continued for nine days. The treatment was then changed to emetine hydrochloride, one grain injections and the third injection produced disappearance of the amoebae.

The drug was also tried in eleven cases of colitis in adult people having blood and mucus in the motions (but no amoebae) and all the cases recovered, about six days being the average period for recovery. (No laxative was administered in any of the cases)."

This series of trials was carried out during November, December 1930 and January 1931, too late for inclusion in the original text. I hasten to take this opportunity of rendering my very sincere thanks to the doctors for their interest in the investigation of this comparatively little known drug.

Regarding the next disease, cholera asiatica, the crude drug bolus was given to a child suffering from infective diarrhoea, as came under notice when abnormal thirst had developed and skin relaxation stage has been reached. The crude drug bolus alone was administered. There was rapid improvement and the child recovered. At this time, cholera happened to be prevalent in the City of Madras and a clinically typical case of cholera came under my notice for treatment and this coincided with the convalescence of the child above treated. The man, aged about fifty, though attacked overnight (having the first two motions on the road side on his way home), had no treatment of any kind till next morning. The case was in extremis when examined. Vomiting had ceased, but the motions which were odourless, had become involuntary; cramps were severe, the extremities were cold and clammy, and the patient had a pinched anxious look, a very feeble pulse, hardly perceptible at the wrist. There was suppression of urine. Hedyotis auricularia bolus was given and an injection of adrenalin and pituitrin given hypodermically. Copious draughts of warm water

were ordered to be given with the bolus. Plain rice or barley water was ordered as diet. No other treatment was given. There was decided improvement in the general condition of the patient. Adrenalin injection was repeated in the evening ; the patient passed urine before bed-time, had undisturbed sleep, and recovered uneventfully in a day more. Unfortunately, no bacteriological examination of the excreta was done. A few more cases were treated in the same manner and one worth mentioning being a woman—a cholera contact—whose son, eight years old, had died that day from cholera. Treated only with the crude drug, she recovered.

Impelled by the consistently good results noticed in the many cases of entero-colitis treated with the extract of *Hedyotis auricularia*, and the results with crude drug in the cases of cholera, (clinically diagnosed), as above stated, I gave the drug an extended trial in the cholera epidemic which was reported from the rural areas of Madura District, South India, in the month of July 1929.

Fifty-one cases of cholera were treated with Hedaurin in the epidemic area. Only six of these proved fatal, which gives a mortality average of 11.8 % as compared with 44.5 % in the same area, prior than the introduction of Hedaurin. In no case was any other treatment adopted, when once this drug was started, for, I took no other equipment with me than a good supply of Hedaurin.

The results were highly gratifying. But further work was not possible till December 1929, when, in rural Tinnevely, an extended trial of the extract of *Hedyotis auricularia* was undertaken. One hundred and seventy cases of cholera in all the types and stages of the disease were treated from 8th to 14th of December 1929. The diagnosis of twenty-two cases from these was verified and confirmed by bacteriological examination of excretal specimens for cholera *vibrios* at the King Institute of Preventive Medicine, Guindy.

Mr. Parasuram Naidu, Labour Agent of the United Planters Association of Southern India, who was distributing "Bilivaccin" for the Department, distributed this drug to the cholera stricken in the village of Vislivanathaperi. He issued the medicine systematically, dose by dose, as required, and kept notes. He records only five deaths among the forty-five cases so treated by him with only Hedaurin throughout the attack. Here, the Village Epidemic

Register showed 106 (?) **attacks** and 88 **deaths** from Cholera from the 24th October, the date of commencement of the epidemic, to 8th December, the date when the new drug was introduced there.

Clinical notes from a few outstanding cases treated are detailed below and the tabulated results are appended (Appendix A & B).

1. Sayyed Duanalli, age 9 years, (Vasudevanallur). An early case. Had four motions. The patient walking about. A specimen from motion was taken. Reported *positive* for cholera vibrios. Given initial dose of two drams Hedaurin, repeated in one dram doses, every three hours. Diet restricted to bland liquids. Three more motions, the third showed bile pigments. Cured.

2. Rahima Bai, age 19. (Vasudevanallur). History of two motions overnight. Looking bright and cheerful. Her people not inclined for any treatment for her. Next day, she was in a collapsed condition, semi-conscious, the pulse very feeble and hardly perceptible. There was vomiting with violent retching. It was reported that diarrhoea re-started the previous evening with severe vomiting, ending in collapse with suppression of urine.

Hedaurin, one dram, every two hours was given. An injection of adrenalin and pituitrin was also given hypodermically.

Cholera vibrios were isolated in a specimen from the vomit.

She had one more motion and two more vomits after the treatment was started but showed signs of improvement before the evening and urine was passed during the night. Seen next day, she was better, though still weak. Hedaurin was continued for two days during convalescence, one dram four times a day. Cured. Total Hedaurin given 14 drachms.

3. Ramalingam, age 5 years (Vasudevanallur). Loose watery motions and vomiting. She was given Hedaurin by Dr. Ramayya, the local practitioner and when seen by me, she was still having muco-serous motions. A specimen was taken from one. No vomiting after Hedaurin treatment which was continued in dram doses. The motions became less in quantity though still watery and full of mucus shreds. The child showed improvement before evening, and another specimen was taken from a motion passed (about twelve hours after treatment), when the motions showing brownish in colour. Cholera vibrios were isolated from *both* the specimens sent to Guindy. Next day the child had a yellow and semi-solid motion and was convalescent. Hedaurin was continued for two

days more in half dram doses, given four times a day, and the child recovered.

4 & 5. Karpayi, age 21, female, (Subramaniapuram). Attacked, 9th December 1929. Had six watery motions and two vomits before Hedaurin was given. A weak pulse and cold extremities. Cramps and suppression of urine. Given two drams of Hedaurin to start with, twelve and more doses were left behind with instructions. Seen again on the 12th, when it was found that she had recovered and was attending on her husband who had been subsequently attacked and who had taken the remaining doses out of those left for her, and had tided over the serious stage. Hedaurin was continued. Eight more doses given. Seen two days later, he had recovered completely.

6. Ganapathi, age 11, (Vishvanathapuri). Attacked early hours of the 11th. No treatment of any kind given till 4 P. M. by which time the patient had altogether seven motions and two vomits. Suppression of urine and cramps present. Weak and exhausted. A specimen taken for examination from a motion. He was given Hedaurin (first dose of two drams, repeated in dram doses every three hours). Decided improvement next day with a report of having two motions. He had no vomiting and passed urine some time after the second motion after treatment with Hedaurin. He was given four more doses to ensure recovery, and was seen going about the village on the fourth day. Cholera vibrios were isolated from the specimen sent to the King Institute.

7. Srirangamma, female (Shivagiri village). Attacked early hours of the 14th, and treated with Hedaurin from 1 p. m. same day. She had had seven loose watery motions and last of these was coloured red, for it was said that she had been given some local specific said to contain red oxide of mercury and essence of Omam Karpoor.

A specimen from this motion was taken for bacteriological examination. She was put on Hedaurin. Motions continued (in all about five) till next morning, but she did not grow worse and her condition improved slowly and steadily on Hedaurin alone. Two more specimens from stools, passed eight and eighteen hours after Hedaurin treatment (when the motions had changed colour to brown) were taken and sent to the King Institute and cholera vibrios were isolated from *all the three* specimens.

Incidentally it may be mentioned that the week, ending 14th January 1929, happened to be the height of the epidemic in the Presidency of Mādras. for the year 1929-1930, there being 1916 attacks and 970 deaths (a mortality of 50.6 per cent.) recorded during the week.

When once treatment with Hedaurin was started, no other medicine was given. This was left, either with the Village Munsiff or with some responsible local resident, for distribution to the stricken. Injections of adrenalin and pituitrin (hypertonic saline in the one solitary case in the Palamcottah Municipality) were given as an additional measure in nine extreme cases of which only one (Case No. 2) recovered.

There were no untoward effects from the use of this drug. It was tolerated well by adults and equally well by *children*. Constipation as an after effect was absent in the cases cured by this drug.

All the specimens from the excreta of patients treated, two only from vomit and all the rest from motions, examined at the King Institute, were reported positive for the cholera *vibrio*. Six of the twenty-two cases, where the clinical diagnosis was confirmed, were fatal cases.

As cholera vibrios were isolated from all the specimens from the twenty-two cases picked up at random from a total of one hundred and seventy cases treated, I think, I am correct in presuming that all the one hundred and seventy cases of the epidemic treated by me were cholera. This, with the twenty-two deaths recorded, works out 12.9 % mortality. But if the nine moribund cases, where adrenalin, pituitrin and saline were injected, are excluded, then the mortality average works out 161:14 i.e. 8.7%. Even taking only the twenty-two cases, verified positive with isolation of cholera vibrios, to be cholera, then the mortality ratio is 22:6 i.e. 27.4% ; but if the four moribund cases are to be left out of account, then the ratio is 18:2 i.e. 11.1% as against 72.75% among those that were not treated with Hedaurin in the District, during the week under notice.

Though the number of cases of cholera treated with Hedaurin, so far, is comparatively small, yet the striking difference in the rates of mortality as above noted in cases treated *with* and *without*

Hedaurin, is, I am sure, strongly indicative of its *certain specificity* in cholera.

The other acknowledged treatment by 'intravenous saline is impracticable, on account of the difficulties of technique, apparatus and staff required for work on a large scale, when cholera breaks out in the rural areas, specially, among the ignorant and the destitute.

This paper is but a record of some observations during the early trials of this new drug by one individual. Here, however, I must gratefully acknowledge the willing encouragement from several of the senior consultants in Madras, whenever the drug was tried in interesting cases.

My thanks are due to Prof. M. O. Parthasarathy Iyengar, M. A., L. T., Professor of Botany Presidency College, Madras, for facilitating the botanical identification and notes ; to Dr. Adiseshan, A. D. P. H. and Lt.-Col. H. H. King-I.M.S., Director, King Institute of Preventive Medicine, Guindy, for affording the facilities for bacteriological verification and to Drs. Ramachandran and Rajaratnam, District Health Officers, for their valuable help in Madura and Tinnevely respectively.

To Dr. B. B. Dey, M.A., D.Sc. (Lond), F.I.C., Professor, and Mr. S. Lakshminarayanan, M.A., L.T., Assistant Professor of Chemistry, Presidency College, Madras, for their keen interest in the chemical investigation of the plant constituents and whose combined labours have resulted in the discovery of a new *alkaloid* from *Hedyotis auricularia*. A second paper on this alkaloid was before the Chemistry Section in this Session of the Indian Science Congress.

Whether the drug will out-live stringent scrutiny and remain a potent drug to combat disease with or be proved worthless will be for future research work to decide.

Regretfully, we have to confess that there is no dearth of material in our country, for, according to the Annual Report for 1927 of the Sanitary Commissioner with the Government of India, the total deaths, in the whole of India including the Indian States, from cholera alone are 26,46,812 for the ten years from 1918 to 1927, in other words, an average of 2,64,681 death from cholera per annum.

The foregoing would strongly convince one that a clear case has been made out as to the efficacy of *Hedyotis auricularia* and its potency in cholera asiatica, and I earnestly appeal to the profession and the scientific world to investigate further the therapeutics of *Hedyotis auricularia*.

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APPENDIX A.

This and the following statements give the results in Tinnevely District.

| Village. | Date of 1st attack recorded in Vil. Epid. Register. | Prior to 8-12-29 before the introduction of Hedaurn. | | | Treated with Hedaurn after 8-12-29. | | |
|---------------------------|---|---|---------|------------|--|---------|------------|
| | | Attacks. | Deaths. | Mortality. | Attacks. | Deaths. | Mortality. |
| Shivagiri ... | 27th Oct. 1929 | 376 | 146 | 38.95% | 4 | 1 | 25.0% |
| Wishvanathaperi ... | 24th Oct. 1929 | 106 | 88 | 83.00% | 54 | 4 | 9.4% |
| Kasudevanallur ... | 13th Nov. 1929 | 86 | 40 | 46.90% | 73 | 11 | 15.1% |
| Other villages ... | ... | ... | ... | ... | 39 | 6 | 15.5% |
| Average for the total ... | ... | ... | ... | 49.20% | 170 | 22 | 12.9% |

The cases treated were not selected. They were taken up as and when they came under notice. Some of them were in extremis. Most of them were the average serious cases of cholera.

APPENDIX B.

Comparative statement of results with Hedaaurin and the Official Cholera Epidemic Reports for the Madras Presidency for week ending 14th December 1929 (*Fort St. George Gazette*, dated January 7th, 1930.)

| Tinnevelly District. | Attacks. | Deaths. | Mortality. | Remarks. |
|---|----------|---------|------------|----------|
| Treated without Hedaaurin ... | 433 | 315 | 72·7% | . |
| *Treated with Hedaaurin ... | 170 | 22 | 12·9% | . |
| Presidency Figures (for all districts combined) ... | 1916 | 970 | 50·6% | |
| Do. Treated without Hedaaurin deducting* from above ... | 1746 | 948 | 54·3% | |

The 12·9% mortality in the 170 cases as came under the influence of *Hedyotis auricularia*, given in the most simple mode of administration i. e. by the mouth and in rural conditions, is creditable indeed.

A CASE REPORT.

BY

A. RAMAN, AYURVEDACHARYA. (A. J. W.)

I was called in to treat a Hindu male aged 75 years with the following complaints :—

1. Paroxysmal Dyspnoea.
2. Pain in stomach.
3. Edema on lower extremities.
4. Scarcity of urine and constipation.

History of past illness : He has been suffering from heart troubles a long time.

History of present illness :—The patient had an attack of Broncho-pneumonea a couple of months back and after recovery from the disease he had gone for a change to Vaidyanath, a health resort, where he had been doing very well for a fortnight or so. He was able to walk a distance of a mile without any help and he could easily digest his usual meals. Performing a religious observance one day, he had to take a bath before sunrise, and the very day he felt unwell by the evening but he did not take to his bed. His temperature began to rise by the following morning accompanied with cold, cough and laboured breathing.

Local Doctors were called in and he was under their treatment for a couple of days. The patient was anxious to return to his native place or come to Calcutta for better medical aid. In spite of the physicians' advice not to remove him at that stage, his relatives brought him to Calcutta.

As soon as he was brought here in a very precarious state, some of the well known Allopaths were called in. They were of opinion that the patient would not survive another 2 or 3 days. The old gentleman grew worse and the Doctors practically gave up all hopes. Then he was kept under the treatment of a Homeopath for a day or two. But the case became worse still. This was the stage when I was called.

Physical examination :—I. The patient was unable to lie down on his bed on account of Dispnoea and the pain in the stomach. He was in a prostrated condition and could scarcely utter a word. Edema was prominent on lower extremities and face. The patient had sub-normal temperature.

II. *Cardio-vascular system*—Difused pulsations were seen over the 4th, 5th and 6th inter-costal spaces on the left side. The appex beat could be felt at the 6th inter costal-space along the anterior axillary line.

On oscultation, the 1st. sound was short & indistinct.

III. *Respiratory system* :—Moist sounds were heard all over the Emphycematose lungs.

IV. *Gastro Intestinal system* :—There was severe type of Tympanities, liver was just palpable under the costal margin. Tongue was dry and coated. The spleen could not be palpated. He was badly constipated.

V. *Renal system*—Urine was high coloured and scanty :—in 24 hours the quantity he used to pass was only 3-4 oz.

Diagnosis :—Dilatation of the heart secondary to the physeemia due to the derangement of all the three Doshas, i. e. Vata, Pitta & Kapha.

Treatment —At the outset of the treatment, the patient was given the following prescription :—

| | |
|------------------|-------------------|
| Re. Snake Poison | gr $\frac{1}{60}$ |
| Musk | „ 1 |
| Makaradhwaja | „ 2 |
| Camphor | „ 4 |

To be taken with water.

Within 5 minutes of the administration of the medicine the body temperature began to rise and gradually it went upto 96° F.

After 4 hours one Brihat vata Chintamoni Pill was administered with honey and Basaka leaf Juice.

By this time the patient felt a little relief, and then an enema was given promptly.

The enema contained one oz. of medicated oil (Maha Dasamoola Tail) and soap water.

Again at 10 o'clock at night one Rasaraj pill was given with honey and Punarnava juice.

The patient had some sleep and rest up to 3 a. m. Again the body temperature went down, and therefore, the first prescription was given with water. The desired result was achieved.

From the following morning the prescription given below was continued for 4 days.

Trivrit
Arjuna Bark
Bala Root
Punarnava Root
Basak
Pippali
Aswagandha

To be crushed and reduced into 4 oz. by boiling in 24 oz. of water and to be administered, 2 oz., both morning and evening after the pills were taken.

Re. Vatachintamani pill. 1

Rasaraj pill 1 to be taken with honey followed with the above said decoction.

Continuing the medicines for 2 days, although the general condition of the patient was better, the obstinate constipation was not remarkably improved; so in the 3rd. morning the patient was given the following decoction with the pill instead of the decoction.

Re. Sonamukhi one tola:—to be boiled in 8 oz. of water, reduced to 2 oz. and to be taken with the morning pill.

4-5 hours after administering of the decoction the patient had very good purging 6 or 7 times and then the patient felt more comfort and showed signs of great improvement. In the evening, the former medicines were continued and he passed the night with less disturbance.

Next morning, thinking the patient would feel much better after a good sleep, he was sponged with warm water, and the head washed with cold water, applying Mahanarayana oil over the head. Soon after the bath was given, he felt sleepy and slept for 3-4 hours. Then alternately the 2nd decoction was given, and also the primary one was not changed.

Within 10 days time the patient was considerably improved. The edema disappeared and the bowels began to function properly.

After this the patient was given massage with Dressing powder for a few days and then with oil (ordinary mustard oil) for a few days and also occasional bath in warm water.

During the treatment the patient was able to stand with help, and his appetite increased and he began to sleep 4-6 hours a day.

Diet :—During the first 3 days the patient was given only the juice of fruits and diluted milk. The quantity of the food was according to necessity.

3 days after, the quantity was increased up to 20 oz. and some fried paddy (khoi) was added to it.

A week after, some fish soup was given along with khoi and milk. Again the diet was increased in quantity but not in quality.

A fortnight after, the patient was given milk with rice, vegetable soup & fish.

The same diet and the said medicines are being continued now.

At present the patient is in his native place, where he feels much better, and where he still continues the treatment more as a precaution than as a necessity.

THE USE OF HONEY

[KAVIRAJ DHIRENDRA NATH RAY, M. Sc., KAVISHEKHAR]

CALCUTTA.

The World has held honey in esteem for many centuries and in India, it has been extensively used as food and Medicine from a very long time. We find copious reference to it in the Vedas ; in every form of Pujas, honey is an essential factor ; during a Sradh ceremony, one must offer honey to the departed. That honey was greatly esteemed in Europe in the olden times is proved by the fact that the Roman Poet Virgil describes it as the "golden juice, not only sweet, but pure and fit to use." The Koran also, in the chapter on the Bee, contains the following :—"There proceedeth from their bellies a liquor of various colour, wherein is a Medicine for man." In fact, a land flowing with milk and honey is the classical description of a bounteous agricultural tract. It is a pity, however, that honey is not now so popular an article of food as it used to be.

Source;—Honey is a very plentiful wild product over the greater portion of India, but it is obtained artificially from domesticated bees, only in the hills of the Punjab and in certain Districts of Burma. A large amount of honey is gathered in the jungle and fields of the Sundarbans in Bengal. The Principal honey season commences in January and lasts till the end of March, but there is another less important season in April and June. The honey obtained in February is considered the finest, while that collected in June is the worst.

Honey is the saccharine substance obtained from the honey-comb of bees. The saccharine matter is gathered by the bees from the nectaries of different kinds of flowers and is sucked into the crops or stomachs where it undergoes many chemical changes. There seems to be little doubt, however, that certain kinds of honey or honey collected from certain flowers, is more or less poisonous. This is also corroborated by the ancient Ayurvedic Surgeon Susruta.

Susruta has described eight varieties of honey :—

(1) Makshika (मक्षिक), or honey collected by the common bee called Mādhumakshika. The colour is like that of oil.

(2) Bhrāmara (भ्रामर), collected by a large black bee called Bhrāmara. This is whitish in colour, viscid and extremely sweet.

(3) Kshaudra (क्षौद्र), collected by a sort of small bee of towny colour, called Kshudra. The colour of the honey is also towny.

(4) Pauttika (पौत्तिक), collected by a small black bee, resembling a gnat, called Puttikā. The colour is like that of Ghee. It has toxic properties.

(5) Chhātra (क्षत्र), formed by towny or yellow wasps which make their hives in the shape of umbrellas. This is specially useful in Hæmoptysis, white leprosy, diabetes and in worms.

(6) Arghya (आर्घ्य) is wild honey collected by a sort of yellow, pointed mouthed bee like the Bhrāmara. It is bitter in taste and is very useful in eye-troubles. It does not aggravate Vayu.

(7) Auddalaka (औद्दालक) is formed by a kind of small towny insects called Uddalaka. These insects generally form their honey-combs in ant-hills. It is a bit sour in taste and is useful in leprosy.

(8) Dala (दाल) is unprepared honey deposited in flowers. It is useful in checking nausea.

Of these the first, Makshika, is the best and is generally used in Medicine. It is specially indicated in cough, asthma, worms, diabetes and obesity.

Properties.

Ordinary honey is a viscid, semi transparent liquid of a light yellowish brown colour, an aromatic odour and of a sweet acrid taste. Some varieties of honey become opaque and crystalline after a time. Pure honey contains about 20 per cent of water and 74 per cent sugar and some quantities of other carbohydrates. Most of the elements found in the human body are in small proportions present in honey. Although the vitamin content is practically nil, possessing as it does very small quantities of Vitamin A and B, honey is not only a pleasant food but also possesses special nutritive properties.

Honey collected from bee-hives formed in orange gardens is called Kamala madhu. It has a sweet flavour and can be freely used for domestic as well as for medicinal purposes. Honey collected by the bees from lotus flowers is called Padma Madhu. It is whitish in colour and soon crystallises. It is an excellent medicine for eye diseases.

In Ayurveda, old honey is preferred to new. And the sample must, of course, be not only pure, but fit to use. When old, honey, specially honey from hilly countries, crystallises and becomes solid, it is called Madhu Sarkara, (i.e. sugar of honey) in Ayurveda. It melts again when kept in the sun or put in hot water. It is specially good for diarrhoea and vomiting.

Honey has got anti-toxic properties.

Honey has great natural keeping qualities and requires neither special storage nor rapid consumption.

Honey should never be used hot or in combination with anything hot. Anybody perspiring from excessive heat should not take honey. Honey should not be taken in large quantities by those suffering from "Vata-vyadhi.

Action.

New honey is considered demulcent and laxative. Honey, more than a year old, is astringent and demulcent. It is light, nutritive, aphrodisiac and is specially good for the eyes. Honey, according to Caraka, is the best of all articles for allaying aggravated Kapha and Pitta.

Honey in moderate doses has a beneficial effect on the digestion and appetite of those with weak stomachs and loose bowels. Honey, sugar and 'goor' are the articles of food which contain the maximum amount of carbohydrates. Besides sugars, the carbohydrates include starches, such as rice, flour, cereals, potatoes and other green vegetables. These are great energy producers and are called fuel-foods, because they provide energy for muscular and other tissues of the body, and generate heat, whereby the body is kept warm.

We thus see that the practice of giving honey to new-born babies is an excellent one, as according to Ayurveda, Kapha, which is a cold substance, predominates in children. Honey decreases flatulence and increases the general functions of the body.

Susruta says that honey can enter the finest channels of the body ; in other words, honey is very easily absorbed by the body. Its value thus lies in providing a readily absorbable food.

Uses.

Honey and 'Goor' are concentrated forms of carbohydrates and so as energy producers, a small quantity is sufficient. We should therefore, like the ancients, make it a habit of taking small quantities of honey everyday. Even the diabetics may safely use this ; in fact, honey will do them good.

As a demulcent (i.e. a mucilaginous substance allaying irritation), honey and barley-water are given internally in constipation and indigestion, in bronchial affections, asthma, chronic colds, troublesome coughs and in sore throat.

It is a useful laxative for children, who take it readily and is safer and far better than cane-sugar.

In severe cases of malnutrition with heart weakness and in cases of weak lungs, honey has been found to have a marked effect in reviving the heart's action. Honey is one of the best foods for a failing heart. We have already said that honey is pre-eminently a most potent fuel for providing energy for muscles. Now, there is one muscle in our body that stands apart from every other muscle. It never takes rest. It never ceases to work, either day or night, and the better for us, for if it should stop, it would mean the end of life. This muscle is the heart. As honey is easily digested and assimilated and as it does not cause flatulence and can even prevent it to a certain extent promoting the activity of the bowels, it can be safely added to our usual four meals a day. Those suffering from blood-pressure and weak heart will derive much benefit by its use.

I would recommend heart patients to take a glass of water with one to two table-spoonful of honey and lemon juice in it, every morning and also before going to bed at night. The practice of the Kavirajes of prescribing honey as an adjunct to most of their medicines is therefore amply justified and is very useful.

Before and after muscular exertion, honey should be given in a generous dose. The use of sugar cannot well replace honey. In the same amount, sugar is chemically irritating to the stomach.

Water in sufficient quantities should always be taken along with honey.

In old age, honey is specially useful for providing energy and heat to the body, which has little of it at that stage. In addition, honey dries up Kapha and clears the system of mucous, which are the two weaknesses that a man generally falls victim to in his old age.

Honey is extensively used in Ayurveda for preparing Asavas, Aristhas and Avalehas.

External Use.

A paste of honey with flour is a popular application to promote maturation of abscesses and bubos. In Bengal, we generally use honey and lime (mixed together) over any swelling of the glands of the groin. Honey with lime is also used as an external application to the temples in headache, to the abdomen and round the navel in colic and to other painful parts such as sprains and bruises.

Honey applied to burns and scalds soothes and heals the ulcers rapidly. In Susruta, honey is specially recommended for any kind of sores. It is prescribed along with other medicines to heal up the wound after an operation.

Rubbed over the teeth with fine powder of charcoal, it makes them clean and white as snow. Rubbed over greasy dirty hands, it cleans them rapidly.

For its natural keeping qualities, honey is also valued as an antiseptic for the preservation of fruits and for making cakes, sweetmeats, etc. which are required to keep for some length of time. In ancient Egypt, honey was much employed for preserving dead bodies.

Reports of Societies Etc.

(Speech delivered at the Opening Ceremony of the Indoor Hospital of the Vishwanath Ayurveda Mahavidyalaya by Mahamahopadhyaya Kaviraj Gananath Sen, Vidyasagar, Saraswati, Pranacharya, M.A., L.M.S.)

Mr. President, Ladies and Gentlemen,

I think no apology is required for opening a new hospital in Calcutta. The dearth of hospital accommodation in this town is well-known. Compared to other great cities of India like Bombay and Madras, Calcutta hardly provides even a quarter of the actual need of the suffering people. And the poor Bhadrakalok classes are particularly worse off in Calcutta in the matter of medical relief. But for the generous assistance given by the Calcutta Corporation and the Government of Bengal, Calcutta's condition would have been far more deplorable in this matter.

The need of an Ayurvedic Hospital in connection with a properly equipped Ayurvedic College here is still greater. That Ayurvedic treatment has been found to be highly effective in many cases abandoned by other systems of treatment is an admitted fact. But at present Ayurveda seems to be confined within the ring-fence of the practice of Medicine, particularly the treatment of chronic diseases. The scope of Ayurveda, however, is much greater. In the palmy days of India, Ayurveda specialised in eight branches, namely, Medicine, Surgery and Midwifery, Treatment of the diseases of the Eye, Ear, Nose and Throat, Psychotherapy, Diseases of Children and the Science and Art of Rejuvenation and Procreative Invigoration. All these lines of treatment were based on scientific observations and experiments and, as we Indians believe, re-inforced by the great intuition of the ancient sages of India. Much of the ancient literature has no doubt been lost during the last 2000 years, but fortunately for the world the kernel of this literature is still preserved to a fair extent. An All-India endeavour is being made by the All-India Ayurveda Mahamandal and Vidyapitha to resuscitate Ayurveda and re-establish it on a scientific basis by supplementing it, where necessary, with modern scientific advances. With this object in view Ayurvedic Colleges and Schools have been started in almost every province of British India and in the Indian States and annual simultaneous examinations are being held by the all-India Ayurveda Vidyapith in about 25 centres of India. The Governments of United Provinces, Behar

and Madras have also come forward in a liberal spirit to allay the suffering of the millions entrusted to their care by helping the revival of Ayurveda through Government Ayurvedic Schools and Colleges. But it is regrettable that for some reason or other the Governments of Bengal, Punjab and Bombay have not yet advanced the cause of Ayurveda in their provinces. Yet Calcutta can boast of four Ayurvedic Colleges and Hospitals supported liberally by the Calcutta Corporation to which all Bengal must be grateful for their generosity.

The need for a general Council and State Faculty of Ayurveda in Bengal has been realised very keenly. Such bodies exist under the Madras and U. P. Governments and the status of Ayurveda has been greatly raised through them in these provinces. The Government of Bengal I am afraid, have taken only a lukewarm interest in the matter, despite the recommendations of the Ayurvedic Committee of Bengal appointed by them as far back as 1920. The matter now stands thus. In 1928, on pressing the matter before the Government I was asked to draft the Statutes of the General Council and State Faculty in collaboration with an Ex-Vice-Chancellor of the Calcutta University and an eminent member of the Indian Medical Service. These drafts were examined by three Ministers coming in succession and approved after some amendments by a conference of learned Kavirajes officially called for the purpose in December 1931. We await the happy and sunshiny day when these Statutes are gazetted in the near future. Perhaps no standardisation of Ayurvedic education would be possible in Bengal until the General Council and State Faculty of Ayurveda are established and the Syllabus of studies and the Rules of Examination and Registration to regularise Ayurvedic practice are laid down under Government auspices.

Allow me, ladies and gentlemen, to mention in this connection what this humble institution aims to achieve in the field of Ayurveda. As the great world-savant, Dr. Rabindra Nath Tagore, when sending his word of blessing and message of hope of confidence (in Bengali) at the Opening Ceremony of this Institution said, "Ayurveda once went on growing and widening like a great flowing river, through observations and experiments but had become stagnant; it was high time we made it flow into proper channels of study and research." In my humble opinion, the ancient Science and Art should not only be preserved but also developed

and expanded without any reservation in the realisation of truth. We should not only cultivate the old traditional knowledge as still preserved in our books, not only supplement them with practical training in every branch of study as recommended by the ancient sages but also make Ayurveda fluent and progressive until it can be reckoned as a national asset of India and honoured as a great acquisition by the world.

With such a goal before us, we started this Ayurvedic College with a noble band of workers, learned and enthusiastic and bent upon following the same ideal as myself. It is no small satisfaction that by giving most theoretical and practical training we have been able to teach our students within a year what medical students usually learn in 2 or 3 years. God pleasing, we hope to be able to turn out our finished products in such a manner as to make them efficient teachers and practitioners of Ayurveda for the next generation.

The Out-door Hospital of this Institution was opened simultaneously with the College on 10th July, 1932. In the period of 8½ months ending 31st March, 1933, more than 22,000 patients were treated in the out-door and both our Medical and Surgical Departments have grown considerably within this short period. It is a source of great satisfaction to us that the Calcutta Corporation has understood the sincerity of our purpose and the scope of our action and have made a decent grant to our out-door department. From the day of our starting this hospital consisting of 22 female and 28 male beds we have been assured of handsome grants, both capital and recurring from the Calcutta Corporation. Many of our friends have also come forward generously with small gifts, in cash and kind, quite voluntarily. We have not yet approached the public but we hope the public will come forward at no distant date to help us in our humble enterprise to relieve suffering Humanity and to give our students proper clinical training with the aid of this Hospital.

Pardon me—Ladies and Gentlemen—if I bring in a little personal matter in this connection. This house of mine was built in 1920 for my residence. I lived for six years in this house and my pious wife Sunity Devi breathed her last in this house. The rooms in which she lived and died have been converted into a female ward. The upper two storeys of the house have been modified to accommodate 47 patients with a matron and nurses to

look after them. An observation ward of 3 beds in the ground floor has been added to make up the total number of 50 beds. And I may further add that I have made up my mind to make a gift of this four-storeyed house to the Institution as soon as the legal Documents and other details are settled.

In conclusion I thank you Mr. Mayor, and the noble guests who have honoured this occasion with their presence, for coming here to-night to encourage me and my colleagues in our humble endeavour to achieve for Ayurveda what is no doubt very difficult to achieve in our present circumstances. May the Almighty, the Giver of all good, and your best wishes help us in our uphill work.

DAYANAND AYURVEDIC COLLEGE, LAHORE.

ANNUAL REPORT FOR THE YEAR 1932-33.

1. S T A F F .

The Total number of the teaching staff and assistants during the year under report was twelve, including the Principal, Ayurvedacharya Pt. Surendra Mohan, B. A. Vaidyavidya Nidhi. There occurred certain changes in the staff as under :—

The services of Dr. Asa Nand, M. B. B. S., who was partly working in the College and partly in the Sutar Mandi Dispensary, were transferred wholly to the college. Dissection in Anatomy was entrusted to him in place of Dr. Siri Krishan, who was relieved of his work owing to this change.

Ayurveda Acharya Pt. Purna Nand Pant, who had served in the Ayurvedic College, Rishi Kul (Hardwar) as Senior Professor for about nine years, was appointed as a permanent lecturer of Nidan in September 1932 in place of Pt. Durga Dutt, Vaid Vachaspati, who was compelled to leave the college owing to non-compliance of the rules of service.

Pt. Parmanand Dutt, Vaid Vachaspati was appointed a Dispensary Vaid in place of Dr. Asa Nand, M. B. B. S.

Sh. Kesra Devi, Nurse Midwife offered her honorary services to assist in the work of treating female patients in the Indoor Hospital.

Pt. Bhanu Dutt, Vaid Shastri, Multani, left the institution on account of his educational tour in foreign countries.

2. THE NUMBER OF STUDENTS.

The number of students on rolls for the year under report was 140 as shown below :—

| Date | 1st. Year | II Year | III Year | IV Year | Total |
|---------|-----------|---------|----------|---------|-------|
| 31.3.33 | 65 | 50 | 12 | 13 | 140 |

The admission to the 1st year class in the last year was very encouraging. It rose to the number 80 and on account of want of accommodation many students had to be rejected. Of all the students in the college there were six Shastris, three Under-Graduates, the rest Matriculates, Visharadas, Pragyas and other Sanskrit Title Holders. In the year under report one lady student joined the college in the 1st year class. It is the first time that a girl student has joined the D. A. V. Institution for boys. The D. A. V. College Managing Committee have accorded their sanction to the effect in order to encourage the study of Ayurvedic Science among the female sex.

3. EXAMINATIONS AND RESULTS.

Out of 61 candidates who appeared in Vaidya Kaviraj Title Examination, held in April 1932, 43 passed and 7 were placed under Compartment rule. This was the last batch of students appearing in two years' course for Vaidya Kaviraj Title. The college committee has allowed two chances (1933 & 1934) to those students who failed to pass the Vaidya Kaviraj Examination last year. Fifteen students appeared in Vaidya Vachaspati (Four Years'-Course) Examination, ten passed and three were placed under the compartment rules.

4. HOSPITAL.

The total number of patients admitted in the Dayanand Indoor Hospital was 322 out of whom 286 were cured, 7 died and the rest were discharged otherwise. The main feature of the Hospital for the year under report is that one of the rooms was reserved for Female Patients. It was equipped with partitions and curtains to conduct delivery and other cases of female diseases. As a result of the new arrangements and of honorary services of Sh. Kesra Devi, the number of female cases rose from 7 as during the year 1931-32 to 14 during the year under report. One delivery

case was also conducted. The development of the Female Ward will be specially useful to the lady students of this college. If the Committee appoints a permanent nurse, better results can be expected on this side of the Hospital. The number of surgical operations performed was only 10. This number is indeed very poor. I would wish the Committee should arrange for a competent surgeon to take charge of the surgical side of the Hospital. The rooms of the Hospital occupied by Boarders should be vacated and utilized as the Surgical Ward.

5. CHARITABLE OUTDOOR DISPENSARIES.

The number of out-patients treated during the year under report at the two outdoor Dispensaries, one attached to the Indoor Hospital and the other situated in the Sutar Mandi, was as follows :—

| | New. | Old. | Total |
|----------------------|------|-------|-------|
| (a) Hospital Outdoor | 8491 | 8226 | 16717 |
| (b) Sutar Mandi ,, | 9284 | 14733 | 24017 |

Thus the Ayurvedic College rendered free medical aid to 40734 persons excluding the Indoor Patients who were supplied with food, clothes, medicines etc. free of charge. The Hospital Outdoor is proving useful to the newly populated areas of Sant Nagar, Krishan Nagar, etc. and is under the charge of the House Physician, K. Jagdish Chand, Vaidya Vachaspati Pt. Parma Nand Dutta, Vaidya Vachaspati attends the Sutar Mandi Dispensary for three hours in the morning and two hours in the evening. The Committee has also decided to provide for his residence in the third house of late Mehta Baldev Das adjacent to the Dispensary. It will certainly increase the number of patients and shall be very helpful to them in odd hours. It is also gratifying to note that the number of out-patients treated at this dispensary has increased by 4866 as compared with the previous year, as shown below :—

| | | |
|--------------|------------------------------|-------|
| Year 1931-32 | Total Number of out-patients | 19151 |
| Year 1932-33 | Total Number of out-patients | 24017 |

Increase 4866

6 BOARDING HOUSE.

The average number of boarders during the last year was 30. Owing to the want of accommodation many students were refused seats in the hostel. It is essential that a hostel for 50 seats be erected, but the main difficulty is of funds.

Boarders and other students took keen interest in Volley Ball and successfully played matches with the teams of adjoining hostels or other institutions.

7. PHARMACY.

The Pharmacy is making a fast progress every year. Its income is gradually increasing and is thus coping with the increased expenditure of the college and the reduced Grants-in-Aid of the Punjab University and the Government. Although equipped with powdering, grinding, pill and tablet making machinery, yet it requires many other machines as mixer and sifter, Jar Mill etc. The Pharmacy affords a very good opportunity to the students to prepare different types of medicines as many as they can. This training is very useful to them in their after-life of medical practice.

8. DOCTOR BELI RAM BLOCK.

The scarcity of Dead Bodies is being keenly felt. We could procure during the last year only three dead bodies from the Medical School Amritsar at the expense of about Rs. 90/-. This number is too small for a class of 70 students who require at least a dozen of dead bodies for efficient training in Dissection work. The Punjab Government has not made any satisfactory arrangement in spite of repeated requests.

9. LIBRARY.

Rai Bahadur Lala Sewak Ram, M. L. C. got erected a decent room measuring 24' x 16' at a cost of Rs. 1000/- for the Library of this college, adjacent to the Principal's office. The number of books rose from 491 to 615, either purchased out of the college funds or presented by the authors.

10. BUILDINGS.

During the last year great many additions were made in the Buildings. In front of the Pharmacy rooms a decent verandah

measuring 230' x 8' with two side rooms, one for the Assistant Manager and the other for the Pharmacy Vaidya, was constructed at a cost of Rs. 2000/-/- collected by the students and staff during the previous years. This would be a protection to the students and other workers doing practical pharmacy against sun and rain. One room adjacent to the machinery room called Bonoushodhi Bhandar was built out of Lala Dharam Chand's donation of Rs. 800/- in his late father Lala Kidar Nath Contractor's memory. This was a long-felt need. A godown for the storage of herbs has been erected at a cost of Rs. 600/- at the back of the College Building.

A part of the Verandah of the Hospital Building has been enclosed with walls to form a sterilization room adjacent to the operation theatre, out of Rai Bahadur Dr. Maharaj Kishan's donation of Rs 900/- to facilitate surgical work. A very decent cubicle (10' x 12') with a verandah in front is under construction out of Dr. Ragubar Dyal's donation (Rs. 500/-). This room is meant for Indoor Patients requiring separate and protected place.

Three water closets (Flush) have been built for the use of boarders at a cost of Rs. 1000/- nearly, collected by the students.

As already mentioned, Rai Bahadur Lala Sewak Ram, M. L. C. spent over Rs. 1000/- for the construction of the Library Room. This room has helped to relieve the Principal's office which was very much congested owing to the Almirahas of Library Books lying in it.

We convey our hearty thanks to the donors for their kind help and patronage in the extension of the buildings.

11. SCHOLARSHIPS.

In addition to twelve Managing Committee and Endowment Scholarships for different classes, there were certain other stipends from the following sources :—

1. Pt. Thakar Datt Sharma's Scholarship of Rs. 6/- P. M. for a poor and deserving student of any class.
2. Kaviraj Harnam Das B. A. S. scholarship of Rs. 5/- P. M. for a student of Mianwali District.

3. Two scholarships of Rs 8/- and Rs. 7/- p. m. from the Charitable Fund of late Lala Asa Nand of Amritsar, for Shastri students of Sanatan Dharam views.

4. District Board Jullundur's scholarship of Rs. 10/- p. m. for a student of Jullundur District.

5. Mandi State Scholarship of Rs. 25/- p. m. for a student of Mandi State.

6. Chamba State Scholarship of Rs. 20/- p. m. for a student of Chamba State.

7. Rampur (Bushair) State Scholarship of Rs. 15/- p. m. for a student of Rampur (Bushair) State.

8. Chandra Vallabh Trust Fund (Garhwal) Scholarship of Rs. 15/- p. m. for a Garhwali Student.

9. Bahawalpur State Scholarship of Rs. 10/- p. m. for a student of Bahawalpur State.

10. Two Refundable Scholarships of Rs. 10/- each from Sir Ganga Ram Trust Fund for Punjabi Students of any class.

11. Aror Bans Sabha's Scholarship as Rs. 5/- p. m. for an Arora Student.

12. Lala Hem Raj Fund Scholarship of Rs. 7/- p. m for a student of Multan or Muzaffargarh District.

Very recently the Managing Committee has been able to receive the payment of Rs. 9600/- out of the promised donation of Rs. 10,000/- of late Pt. Shankar Das, Engineer, Dehra Dun. Rs. 6000/- have been set apart for three scholarships of Rs. 7/- p. m. each to be awarded to Brahman students of Udichya caste. The rest of the sum (Rs. 3600/-) will be utilised for the erection of a Museum Herbarium in memory of the donor late Pt. Sankar Das. The site has been approved of by the Managing Committee and Construction will begin very shortly.

12. THE END.

Ayurved is as vast as the Universe itself. To put in the words of Charak, it is eternal and universal. It comprises, not only, the human life but every micro-organism, hitherto found. In spite of its so extensive a scope, Ayurved seems now a days to be a very limited Science. The causes of its limitation are manifold and cannot be dealt with in this short report. Whatever be the case,

the Dayanand Ayurvedic College Lahore, under the patronage and guidance of the D. A. V. College Managing Committee and its supporters, is doing its best to encourage the study of Ayurved and extend its treatment among the public, although its sources of income are very very limited, the capital fund very meagre. The Grants-in-Aids, given by the Punjab University and Punjab Government both amount to Rs. 4000/-nearly which is very little as compared with the grants given to sister institutions in U. P. by the Board of Indian Medicine, Lucknow. The Board gives an annual grant-in-aid of Rs. 50,000/-to Ayurvedic College of the Hindu University-Benares, the same amount to Tibbia College of the Muslim University, Aligarh, Rs. 10,000/-to Ayurvedic College, Rishikul (Hardwar) and so on. The Madras and Behar Governments are maintaining schools of Indian Medicine fully at their costs. The Calcutta Corporation pays a grant of Rs. 10,000/- to Ashtang Ayurvedic College, Calcutta. The Punjab Government spends over two lacks of rupees on King Edward Medical College, Lahore, about half the amount on Medical School, Amritsar. Is it not worth-while to approach the Government to increase the grant at least to Rs. 10,000/- annually and to Rs. 5,000/- in case of the Punjab University ?

With money in hand and earnest work by the controllers of the institution, the Ayurvedic College can progress like any other Allopathic Institution of India.

Sd. Ayurvedacharya Pt. SURENDRA MOHAN, B. A.

Vaidyavidya Nidhi

Principal,

DAYNAD AYURVEDIC COLLEGE, LAHORE.

Medical News and Notes.

Calcutta-made Substitute for Quinine.

Attempts are being made in the Chemical Research Laboratory of the University College of Science, Calcutta, to replace quinine by a similar compound, the starting materials which are cheap, and the commercial possibilities of which are considered promising, states *Bombay Medical Journal*. Prof. H. K. Sen and Prof. Umaprasannya Basu, who have synthesised this new compound in their College Laboratory hinted in an interview with the Associated Press that this new reduced *isoquinoline derivative*, which has been pharmacologically tested, has been found to be a salubrious substitute for quinine. Its toxicity is less than that of quinine but its bactericidal property is nearly equal. It is free from the side effects of quinine, and hence promises to be an excellent substitute as an anti-pyretic and also as an anti-parasitic. As an ammonium salt, it is moderately soluble in water, but considerably less bitter than quinine in taste. As the starting materials for the synthesis of this compound are cheap, both Dr. Sen and Prof. Basu think that its commercial possibilities are not to be doubted. The value of such a synthesis can be appreciated, they say, when one takes into consideration that no elaborated plantation or heavy investments, which are necessary in producing quinine, are required in this case. As a matter of fact, say both the professors, it is synthesised from coal tar derivatives and derivative of an acetic acid; all of which are already commercially available in the market. The chemical name of the new synthetic drug is ammonium salt of 3-Keto-4-cyano-1-hydroxy-2 : 3 : 5 : 6 : 7 : 8-hexahydro-isoquinoline.

Madras Ginger and Pepper Crops.

The following final forecast reports have been issued by the Commissioner of Land Revenue and Settlement :—

The area under ginger in 1932 is estimated at 10,300 acres in Malabar, against 10635 acres in the previous year.

The seasonal factor is estimated to be normal and the crop is expected to yield 3,700 tons of dry ginger against 3,900 tons in the previous year.

The price of dry ginger varies from Rs. 34 to Rs. 33 per candy of 500 lbs,

The area under pepper, in 1932, is estimated at 80,000 acres in Malabar and 7,700 acres in south Kanara, against 83,409 acres in Malabar and 7,534 acres in south Kanara in the previous year.

The crop in Malabar was affected, to some extent, by the "Pollu" disease, owing to excessive rains in October and November, 1932.

The seasonal factor is estimated to be 95 per cent. in Malabar and normal in south Kanara. On this basis, the yield is expected to be 11,400 tons for Malabar and 1,200 tons for south Kanara or 12,600 tons for the West Coast. This is the same as in the previous year.

The present price of pepper varies from Rs. 117 to Rs. 125 per candy of 500 lbs., against Rs. 160 reported in August, 1932.

Registration of Trade Marks.

The following resolution, proposed by the Bombay Chamber, was passed unanimously at the annual meeting of the Associated Chamber of Commerce in India, held in Calcutta :—

That, in the opinion of this Association, the Commercial circumstances and conditions of the present time require the enactment of legislation to provide for the registration of trade marks in India in such manner as will give the registered user of any mark the right to an immediate injunction preventing the use of such mark or any colourable imitation thereof by others, subject only to proof of prior usage by the defendant in any dispute.

A Materia Medica Scholarship.

Dr. Chandra's Scholarship in Materia Medica and Therapeutics, open to past or present senior students of the Calcutta Medical College, will be awarded during the present session.

Candidates for the scholarship have to submit an essay on the pharmacological action and therapeutic uses of *Rauwolfia Serpentina* (dhan barua or dhan marua).

Derries Root Insecticides.

There is little doubt, that the demand for insecticides of the derris (tuba) root type is rapidly increasing, and that the future is destined to see the development of a steadily expanding trade in these materials. Hitherto supplies of the *Derris elliptica* have been largely obtained from the wild plants, but the attention of planters in the Dutch East Indies and elsewhere is being more and more directed to the possibility of derris as a cultivated plant, says the *Chemical Trade Journal*.

According to N. Schmidt (*Tropenpflanzer*, 1932, No. 9), one of largest European rubber undertakings, the Caoutchouc Maatschappij, has already commenced a large experimental plantation in Sumatra, and its crop has been sold ahead for the next two years. It is estimated that the annual production of the company during its first two trial seasons will be about 300 tons. Production of wild derris root in Sumatra in 1927 is estimated as having been about 10,000 kilogs. only.

In British Malaya, also, efforts are being made to establish a plantation industry, a large English company, engaged in the insecticide trade, having already acquired a large acreage for the purpose in the State of Johore; while Japanese undertakings as well are interested in the derris plantation industry in the same State. In Sarawak, Borneo, there is understood to be an acreage under derris of 2,000 at present, whilst a Malayan planter has commenced operations in Java on the area of 2,000 acres.

The present difficulties in the derris root trade are twofold; firstly, the great variation (from 2 per cent. to 30 per cent.) in the quantity of rotenone contained in the root, and, secondly the bulkiness of the material, which makes freight charges distinctly high. Trials have been made in grinding the raw material and shipping it pressed in bales. Experiments have also been carried out on the extraction of the active constituent, rotenone, at the place of derris production, and shipping the product as a concentrated powder, but these experiments have so far, not been very successful. The most promising progress has been made by the Deli Proefstation of Medan, which produces from the root a concentrated emulsion which only requires dilution for utilisation. This emulsion loses its toxicity in time, but its permanence is greater than might have been anticipated. In 1930, 100,000 kilogrs. of this emulsion were

made. It is being employed in large quantities on the tobacco plantations of Sumatra, where it is replacing the preparation "Venetan" sold by the I. G.

Experiments, (*Anzeiger fur Schadlingskunde* Vol. IX, Part I) recently carried out by Dr. M. Schmidt of Wiesbaden, have shown that the toxicity of rotenone is considerably increased by admixture with ground, untreated derris root. The insecticidal efficiency of the mixture is about double that which would be expected from the actual content of rotenone in the mixture.

Separation of Medicine from Pharmacy.

The long drawn-out struggle between Japanese physicians and pharmacists regarding the principle of separation between medical and pharmaceutical practice took a new turn recently, when the attempt made by the Japan Medical Practitioners' Union to petition the Central Government not to recognise the principle of separation between two professions was met by determined opposition at the hands of pharmacists' organisation. The *Weekly Druggist*, Tokyo, states that at its 14th general meeting of the Japan Medical Practitioners' Union, held in Tokyo for two days, on November 25th and 26th, it was decided to present a petition to the Imperial Diet at its next session not to recognise separation of medicine and pharmacy. This decision aroused the indignation of pharmacists. On November 28th, the Japan Pharmacists' Union sent the following circular to the pharmacist organisation in various prefectures: "Sir our Union desires that your organisation will do your utmost in order to induce the members of Diet from your prefecture to oppose the anti-social petition, to be presented to the coming session of the Imperial Diet, to prevent the Government recognition of the principle of separation between medical practice and pharmaceutical prescription." It has been reported that local pharmacists' organisations had started the campaign against the physicians' resolution even before they received the circular from their national organisation.

Subsidising Durg Research.

Japan plans to cut down imported medicines, now amounting to about 20-million yen, by ten per cent. by giving government subsidies to researches to be undertaken into the manufacturing of medicines, now imported, states the *Weekly Druggist*. Another object of the proposed subsidies is to lower the cost of medical

treatment. The subsidies are to be given at the recommendation of the Pharmaceutical Promotion Commission. On December 14th, the list of medicines on which investigation should be made was announced. Subsidies are to be given for the attempts at industrialisation of researches already accomplished. They will be given to those concerning medicines and supplies now being imported. The officials of the Home Department, under whose jurisdiction the work is to be carried out, expect to cut down the amount of imported medicines by two million yen in the first stage of the proposed plan.

Efforts will be made to investigate the cultivation of *santonin*, which is now being imported from Soviet Russia to the amount of 3,000,000 yen per year. Similar study will be also made into *quinine*. The Home Department also plans to revise the tariff on imported drugs. It is anticipated that the tariff on the following medicines will be revised : Bromine, bromic acid, carbolic acid, *digemia wulfeni*, phenyl salicylate, antipyrine, apricot water, pyramidone, antifebrine, formaline, hydrochloric soda, acetic acid, acetic anhydride and aspirin.

Malaria Research.

The recently issued annual report of the Institute for Medical Research, Kuala Lumpur, which covers the year 1931, states that, during the year, several drugs have been submitted for testing in regard to efficacy in the treatment of malaria. The therapeutic value of *quinine-stovarsol*, *malarcan*, *atebrin* (erion), and a Chinese drug of unknown composition, has been investigated. Including control cases, 169 individuals have been specially treated, and observation has been continued, after the termination of treatment, for periods varying from a few days to several months. *Atebrin* has been produced by the makers of *Plasmoquin*. Preliminary tests made in Europe show that the drug destroys the parasites of Avian malaria, and is effective in the treatment of human cases inoculated, for therapeutic purposes, with malaria parasites. Its composition has not been divulged, and it is said to be a synthetic preparation based on a formula evolved by Professor *Schulemann*. The Chinese preparation, which had achieved a local reputation for the treatment of malaria, was forwarded for testing by Dr. *Ansely Young* of Klang. The preparation appeared to be a galenical decoction or infusion. It had a taste rather

similar to flat toddy, and, when tested for alkaloids by Mayer's reagent, a negative result was obtained. The directions mentioned that vomiting was induced, but that this symptom was of no moment, and that a single dose would cure an attack. The preparation was tested on a benign tertian case. Severe vomiting occurred half-an-hour after the drug had been swallowed; subsequently, no curative effect, that could be ascribed to the drug, was observed. Parasites continued in the peripheral blood, and it was concluded that the preparation was useless in the treatment of benign tertian malaria.

Toxicological Examination.

During the year the Division of Chemistry examined 212 samples which included viscera, stomach contents, vomit, faeces, urine, and medicine. The poisons identified were, the alkaloids of datura, morphine, strychnine, cyanide, acetic and formic acids, alcohol, lysol, and mercury. Of special interest is the increased number of exhibits, which show positive indication of drugging by datura; alkaloids from this source were identified in nine samples of urine, eight of stomach, seven of vomit and seven of food.

The following are summaries of cases of interest :—

A male Chinese purchased some seeds from a Chinese drug store; after drinking a decoction, made from the seeds, he became ill and died in convulsions. The viscera and a sample of the seeds were forwarded for analysis, and $\frac{1}{2}$ grain of strychnine was isolated from the viscera, while the seeds were identified as those of *Strychnos ignatii*.

A male Chinese died shortly after drinking a decoction made from a root supplied to him by a medicine man. The viscera and a specimen of the root were submitted for examination. The root, which closely resembled Gelsemium, contained an alkaloid, and a small quantity of an alkaloid was also isolated from the viscera. This was not identified, but a small quantity injected into a rat caused death, with signs similar to those occurring in a second rat, which had been injected with the alkaloid obtained from the root.

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Whither Ayurveda !

BY

KAVIRAJ M. K. MUKHERJEE, B. A., AYUREDA-SASTRI.
CALCUTTA.

A pamphlet, so entitled, was sought to be distributed on the occasion of an important function in the history of the resuscitation of modern Ayurveda. I could not divine the exact motive. Was it a well-meant note of warning, sounded to guard against an iconoclastic tendency to westernism in the name of rendering Ayurveda upto date with a vengeance? If so, there was little justification in the solicitude and anxiety expressed, in apprehension of a devouring leaning towards westernism, that has, of late, been noticed in some attempts. If the writing meant condemnation, it certainly betrayed malice or to say the least, myopia. It is very good to say that the creditor Ayurveda of old is now up and out to enforce and exact the repayment of her legitimate dues from her debtors, —if possible, even with compound interest. There is a good deal of sense, also, in holding that head-long strides should yield place to counting steps, in the conquering expectation that Ayurveda aims at embarking upon by reviving herself from her slumbering state, in which her queenly dignity had, almost, vanished. It is almost an universal and eternal fact that the slogan of reformation has always sought to throw the old overboard. To restrain overzeal should be the counsel of wisdom for every reformer so that improvidence might not engulf him. In all our attempts, utilising our nascent energies striving from overflowing national awakening to see

the mother land reinstated in her full-fledged pristine glory, progress should be measured by a scale, very cautiously devised. We have to supplement Ayurveda in various ways, and we should effect this consummation with intrepidity and straightforwardness. But this is a process, also pregnant with possibilities for harm, if it encompasses our forgetfulness of self and makes us responsible to the future generations for supplanting Ayurveda by the exotic elements of western sciences. I do not know if the pamphlet tried to carry on a nasty competition by poohpoohing the rival attempts of restoring the glory of Ayurveda. Bengal is still the premier centre of culture and attracts learners from all parts of the country. The metropolis, Calcutta, boasts of a unique position in India in the existence of as many as four colossal Ayurvedic Colleges with attached hospitals for relieving the pains of suffering humanity, which is the main objective of Ayurveda, which, according to the Shastras, should be learned and pursued by her votaries as an ideal of life dedicated to medical service. These institutions are run on different lines, and it is a necessity that when something lost is sought to be retrieved, a good number of experiment is to be made. It is, no doubt, certain that such experimentation may not succeed in every case. But the truth must emerge from such honest endeavours in the end. It is also this process which the workers for beauty adopt to attain to God-head. There have been talks of unifying all these institutions, to achieve something colossal by a big amalgamation. Speculations are, also, active regarding the future of Ayurveda, and arguments are emphatically advanced to establish the opinion that this vast city has not the need of more than one Ayurvedic academy.

These are the results of superficial thinking, just as the conflict of the two schools in the field of Ayurveda, *viz.*, the Iconoclastic Reformers, and the wary

Hesitants, has no deep basis. In the very nature of things, things must go the way of all things, if they are not the real things. We must tolerate and try every attempt with a broad-mindedness, begotten of sincerity and faith. The achievement of a size by an artificial welding is a mere mockery, worthy of an ephemeral existence, if differences in fundamentals and essentials exist in the elements composing the form. The matter is not the extent and area of the metropolis, where so many Ayurvedic Institutions are cropping up. It is but a manifestation of the necessity of the different attempts that have to be launched upon, so that the land of success and truth may be reached by the bark, which survives as the fittest one, automatically to bring about a unity of principles and methods, the establishment of which makes any number of institutions welcome to one and all. This consummation will efface these academies, which are in the wrong, and the much desired absorption of one into the other for the sake of strength and size, for the facility of growth, or the development of any separate existence to the full stature is then but an easy achievement. What is needed preferably is the latter thing. And this is why all organisations thrive by rivalry conducted with purity and healthy co-operation. Absence of competition in the case of oneness or fewness, oftener than not, means corruption. Plethoric growth by absorption or in the natural process so overburdens the organisation that the unwieldy size spells subversion of the main objective. Apart from other considerations, despite the unsettled state of Ayurveda, and her handling in different ways, she is still relieving the physical sufferings of afflicted humanity seeking asylums in her different strongholds in the metropolis in a gratifying competition with sister organisations, conducted in Western style. If Ayurveda is true to her ideals, she should not forget the injunction of the Shastras that the friendly sweetness of a deliverer should characterise her presence and touch. Hospitals will then be sweet homes, where the unfortunates sheltered will lack nothing of the heart they received in abundance from their own people. Ayurvedic hospitals are not to be like officialised organisations, where grudging words, grim eyes, dry performance of duty, mercenary considerations, and alarmed-looking patients are the glaring features.

Original Articles

THE TIBETAN SURGICAL INSTRUMENTS.

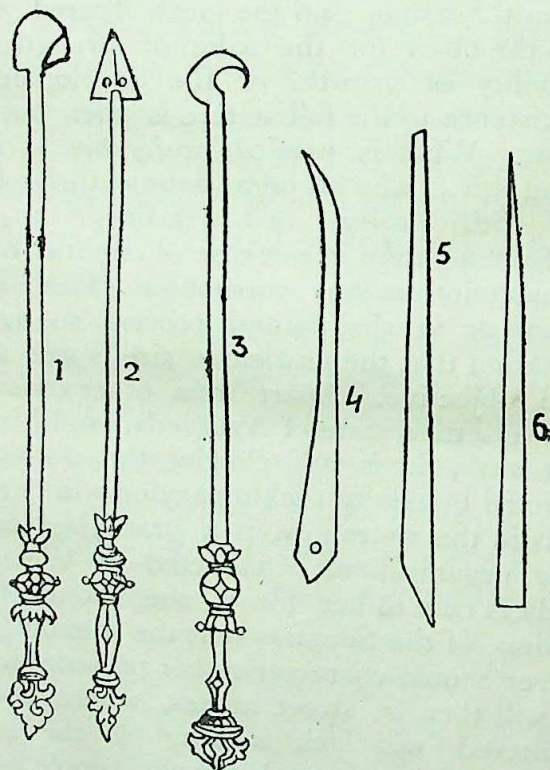
BY

DR. GIRINDRA NATH MUKHERJEE, B.A., M.D., F.A.S.B.
Calcutta.

PLATE 9.

| | | | |
|----------|----------|-------------------|-----|
| New No 1 | — No. 37 | of original plate | III |
| „ „ 2 | — „ 36 | „ „ „ | „ |
| „ „ 3 | — „ 32 | „ „ „ | „ |
| „ „ 4 | — „ 20 | „ „ „ | „ |
| „ „ 5 | — „ 22 | „ „ „ | II |
| „ „ 6 | — „ 6 | „ „ „ | I |

PLATE IX.



No. 1 looks like a Vandalagra knife. For a description of this knife, see S. I. H., Vol. I, pp. 225—230. Compare with the instruments figured in Plate LVIII. in Vol. II.

No. 2 looks like a perforator to be used in midwifery practice or it may be a Danta-sanku or tooth-scaler. See S. I. H., Vol. II, Plate LXXV.

No. 3. This instrument is evidently a vadisa or hook. For figures of hooks used by the Hindu Surgeons, see S. I. H., Vol. III, Plate LXIV.

No. 4. This instrument is a surgical needle. For the various kinds of surgical needles, see Plates LXX, LXV. The Hindus were experts in manufacturing needles. Lord Buddha in a former birth was a good needle maker.

No. 5. This is the common Nakhasastra or nail-parer. Compare with Plate LXII, S. I. H., Vol. II. It is still used by the barbers in India.

No. 6. This instrument is the Ara or awl. It was used in perforating bones. Compare with the instruments figured in Plate LXXII, in S. I. H., Vol. II.

PLATE 10.

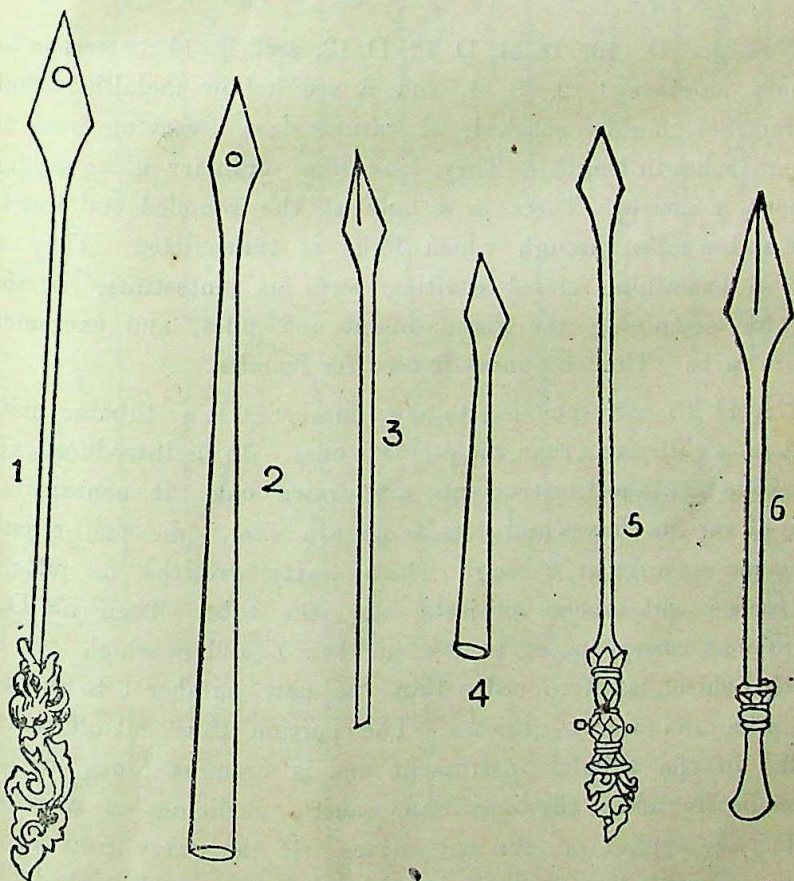
New No. 1

" " 2
" " 3
" " 4
" " 5
" " 6

—No. 27 of original Plate III.

— " 5 " " " II
— " 15 " " " . "
— " 8 " " " "
— " 14 " " " "
— " 7 " " " "

PLATE X.



No. D. 9 is a very sharp-edged narrow-shaped instrument with a hole towards the pointed end, four inches in length. It is used in opening abscesses, and it also serves the purpose of an exploring needle. This description evidently refers to numbers 1 and 2 in this plate.

Numbers 3, 4, 5, and 6 are sharp knives and were used for various purposes and resembled the Vriddhipatra, the Utpalapatra and the Kusapatra knives, figures of which will be found in Plates LXI, LXIV, LXVI in Vol. II of S. I. H.

PLATE 11.

| | |
|-----------|-------------------------------|
| New No. 1 | —No. 35 of original Plate III |
| " " 2 | — " 30 " " " " |
| " " 3 | — " 33 " " " " |
| " " 4 | — " 34 " " " " |
| " " 5 | — " 28 " " " " |
| " " 6 | — " 17 " " " " |
| " " 7 | — " 6 " " " " |
| " " 8 | — " 13 " " " " |

Numbers D. 10, D. 11, D. 12, D. 13, and D. 14 corresponding to new numbers 1, 2, 3, 4, and 5 are hollow metallic tubular instruments, highly polished, of various sizes, (varying from two to four inches in length). They look like ordinary glass syringes without a nozzle. There is a hole at the rounded end and two more at the sides, through which light is transmitted. They are used in examining closed cavities, such as intestines, urethra, etc., for examining the Fistula-in-ano and piles, and excrements of soft parts. The long ones are used for females.

No. D. 15, corresponding to new number 6 is a tubular instrument of smaller size than the previous ones. It is introduced after the above mentioned instruments are drawn out. It contains six holes of various shapes and sizes, some are oval, some semi-circular, and some are angular, through which warty growths, or piles, or extraneous substances project into the tube. Then no. D. 16 instrument, corresponding to new number 7 and 8, which look like rounded chisel, is introduced within the new number 6 to shave off the piles and warty growths. The portion thus cut off remains loaded in the tubular instrument and is brought along with it. Immediately after the operation, caustic medicines or a red-hot cautery is applied on the cut surface. If the warty growths, etc. remain beyond two fingers' breadth, they are not disturbed.

The speculum of the Tibetans is in no way behind that of the Europeans ; with the help of these instruments correct diagnosis of diseases of closed cavities are easily arrived at, and operations of piles and extra growths are done with nicety.

These instruments may be compared with the Nadi Yantras or Tubular instruments of the Hindus. See Plates XIX, XX, XXII, XXIII, XXIV, in S. I. H., Vol. II.

Bhagandara Yantra.

Arsa Yantra or tubular instrument for piles.

Sami Yantra.

Yonivrneksana or Vaginal speculum.

Rectal speculum, etc.

PLATE XI.

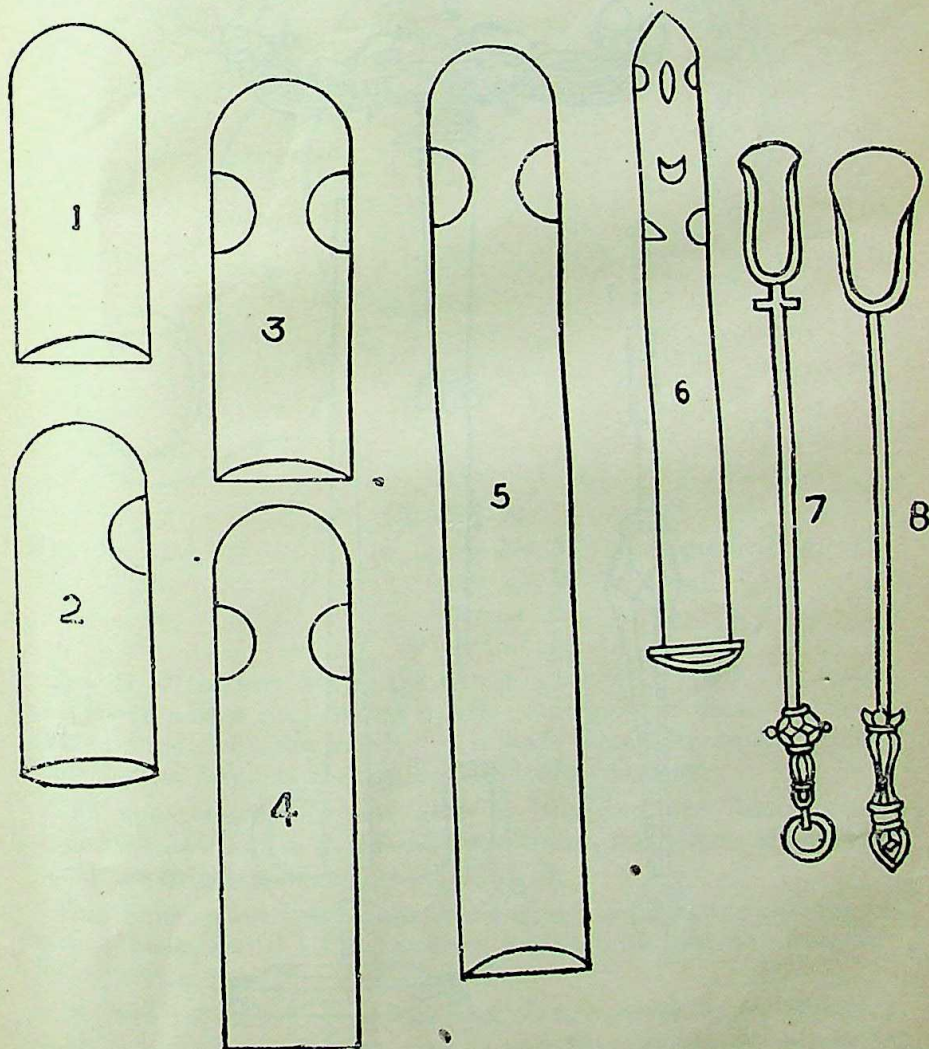


PLATE 12.

New No. 1.

,, ,, 2.

,, ,, 3.

— No. 19 of Plate II

— „ 22 „ „ III

— „ 23 „ „ III.

Numbers D. 21, D. 22, D. 20 are the corresponding numbers. These are instruments like trocar and canula. They also serve the purpose of an aspirator.

These instruments may be compared with the Nadi Yantra or Tubular instruments for ascites—the Dakodara or Jalodara Yantra, Hydrocele-trocar and canula for Paracentesis abdominis in modern times. See these instruments as figured in Plate XXVI in S. I. H., Vol. II.

PLATE XII.

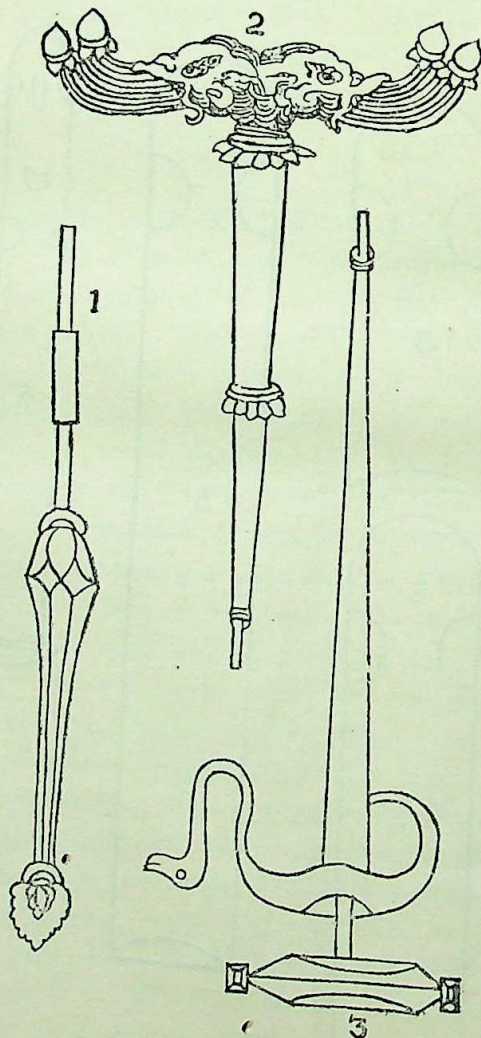


PLATE XIII.

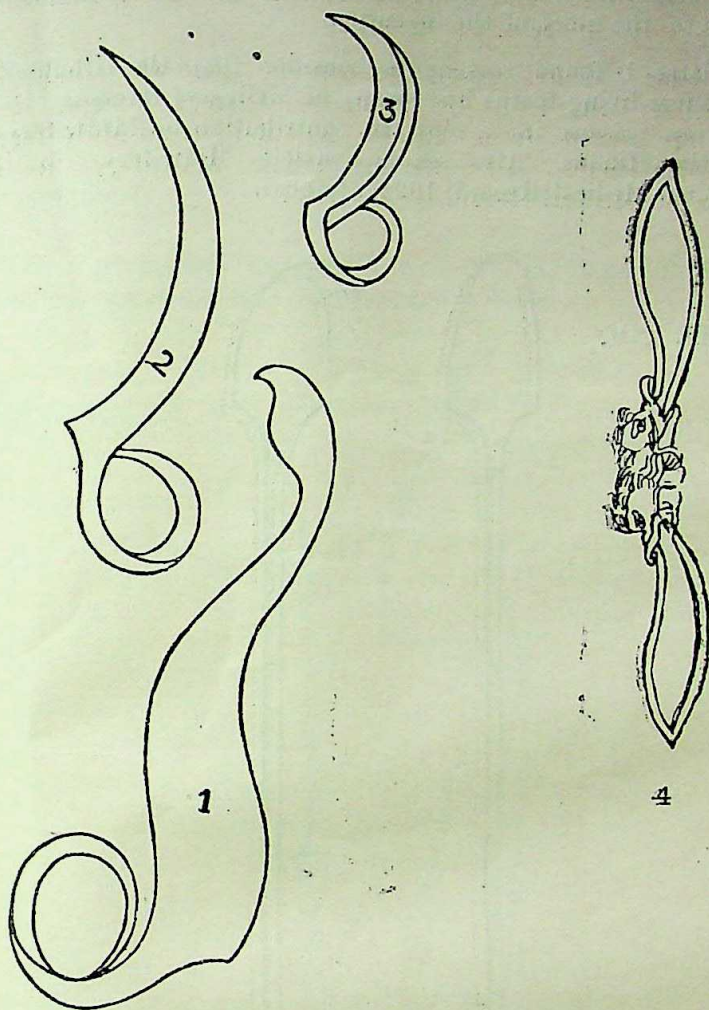


PLATE 13

| | |
|-----------|--------------------------------|
| New No 1. | — No. 31 of original Plate II. |
| " " 2. | — " 30 " " " " |
| " " 3. | — " 32 " " " " |
| " " 4. | — " 18 " " " " |

No. D. 47 corresponds to the new numbers 1, 2, and 3. It looks like a spoon with a ring shaped handle ; it is used to draw out dead foetus or child, from the womb. It is made according to the curves of the pelvis, just like the English Midwifery forceps.

The spoon-shaped forceps used in drawing out dead foetus, though it is deficient in finish and style, brings forth their knowledge of anatomy into prominence.

The Sanku yantra used by the ancient Indians was a foetus or Traction hook, and the Yugma sanku was used by them to draw out a living foetus from the womb.

In page 167 of my work *Surgical Instruments of the Hindus*, Vol. I., I remarked, "Thus we may be sure that there is no available

evidence of the use of delivery forceps by the Hindus, Greeks, Romans and Arabs ; and the Chamberlens are still the undisputed claimants to the glory of the invention.

But later I found reasons to consider that the Hindus knew how to deliver living foetus by means of delivery forceps. I shall describe my reasons in a separate contribution on Midwifery forceps of the Hindus. Also see my article Midwifery in India in the Indian Medical Record, 1924, October.

PLATE XIV.

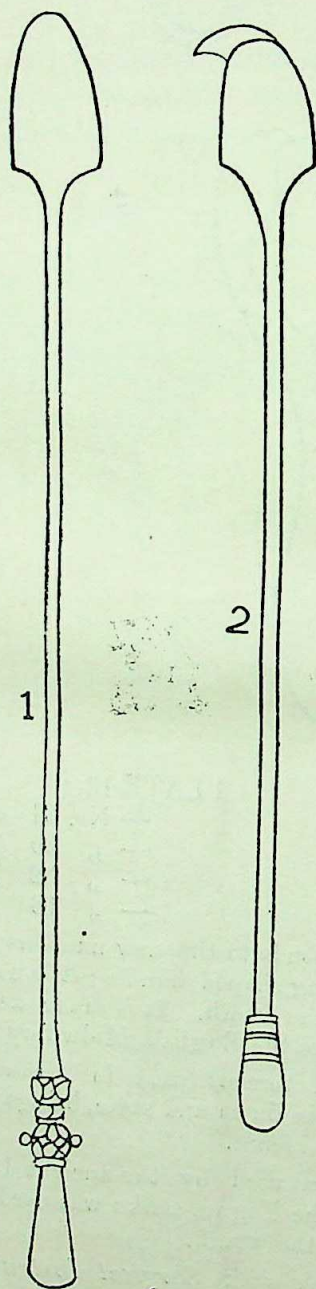


PLATE 14.

New No 1.

—No. 1 of original Plate 1.

" " 2.

— " 2 of " " "

These instruments are either spoon or spoon shaped curette. No. 2 is a spoon combined with knife. No description occurs in the descriptive key.

PLATE 15.

New number 1.

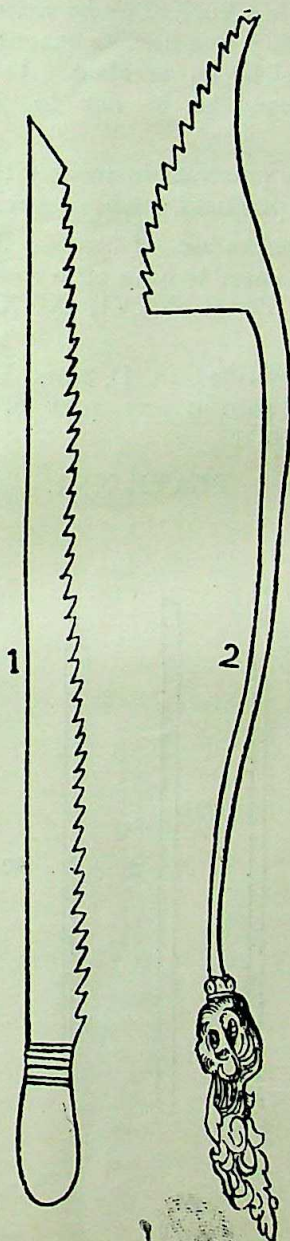
— No. 13 of original Plate II.

" " 2.

— " 2 " " " I.

These instruments are referred to in No. D. 42 and D. 43. These are surgical saws and were used for sawing bones.

PLATE XV.



The ancient Hindu surgeons used saws in surgical practice and the instruments are figured in Plate LX in S. I. H., Vol. II.

PLATE 16.

| | | |
|----------|----------------------------|-----|
| New No 1 | — No. 10 of original Plate | I |
| „ „ 2 | — „ 1 „ „ „ | III |
| „ „ 3 | — „ 38 „ „ „ | III |
| „ „ 4 | — „ 39 „ „ „ | III |
| „ „ 5 | — „ 17 „ „ „ | II |
| „ „ 6 | — „ 2 „ „ „ | III |

The new number 1 is a kind of probe with rounded blunt points three inches in length ; it is used to examine the nature of a fracture on the skull, caused by an accident. It is introduced quietly and slowly into the wound so as not to press the substance of the brain.

Cranial surgery was practised in ancient India as we know from the life of Jivaka who practised trephining with success.

Susruta recommends the use of probes in surgical practice and various kinds of probes seem to have been used. For the figures of the ancient probes see Plates XXVI, XXXVII, etc. in S. I. H. Vol. II.

New number 6 is described in D. 2 and D. 3. It was used in ascertaining the seat of pain in any part of the body. They are each six inches in length.

PLATE XVI.

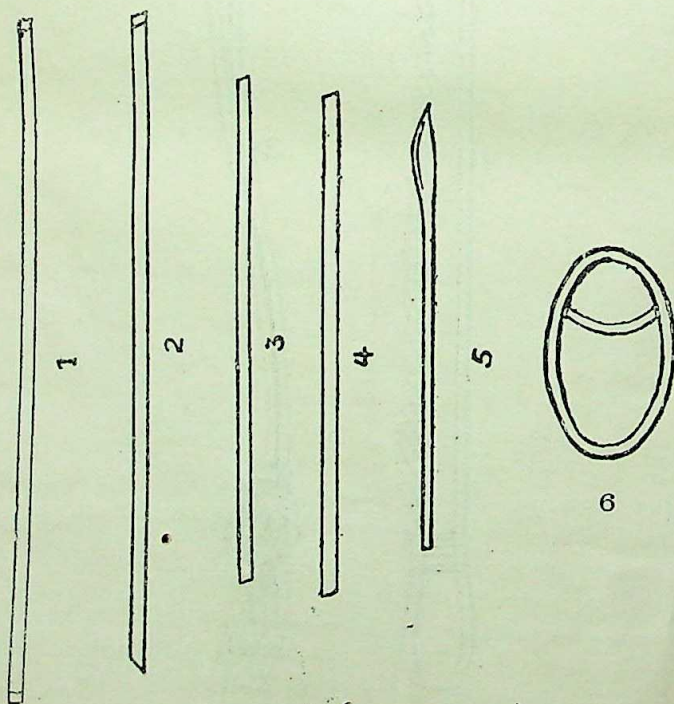


PLATE 17.

| | |
|--------------|------------------------------|
| New number 1 | — No. 9 of original Plate II |
| " " 2 | — " 10 " " " |
| " " 3 | — " 12 " " " |

These are instruments for actual cautery. The Hindu surgeons evinced a partiality to fire as a therapeutic agent. As by the application of fire, diseases are cured permanently and they never reappear. Hippocrates also held the same view.

PLATE XVII.

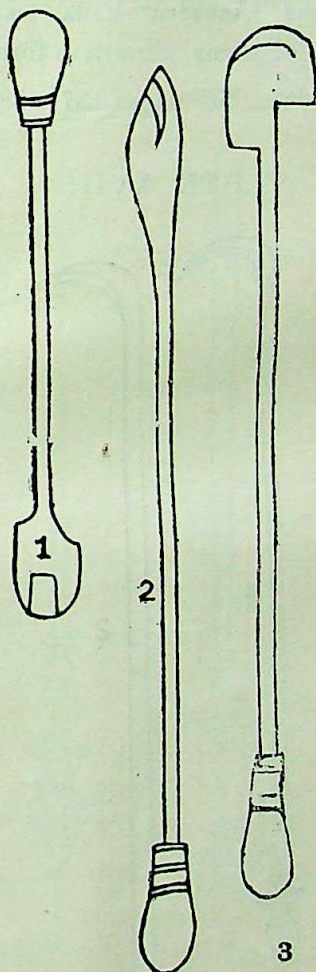


PLATE 18.

New number 1

— No. 1 of original Plate II

" " 2

— " 2 " " " "

No. D. 48 describes an instrument resembling the head of a snake and is used for cleansing the urethra, like catheters.

The Hindu surgeons used instruments, resembling the head of a snake. This is called Sarpaphana instrument. The Sarpasya knife or Polypus knife is recommended to be used for cutting away nasal polypus.

The modern catheter is no doubt a sarpaphana instrument, but the use of a catheter is not distinctly mentioned in the Susruta Samhita. But in the Atharva Veda we find unmistakable testimony of the use of some primitive form of catheter to draw out urine from the bladder. See pages 137—38 in S. I. H., Vol. I.

PLATE XVIII.

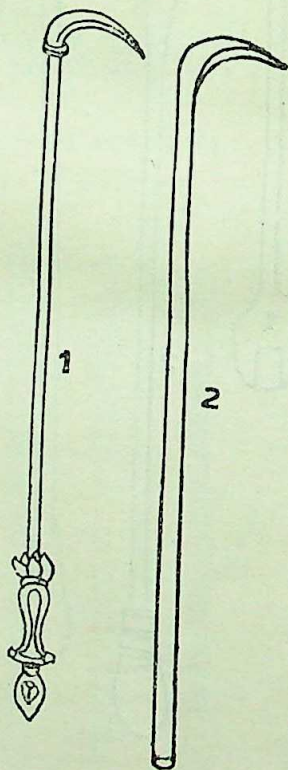


PLATE 19.

New number 1

" " 2

" " 3

" " 4

" " 5

— No. 24 of original Plate III

— " 25 " " "

— " 26 " " "

— " 29 " " "

— " 31 " " "

These instruments are comprised under No. D. 50 which is a kind of rod with one end bent at right angles. It is used for cauterising after making it red hot.

PLATE XIX.

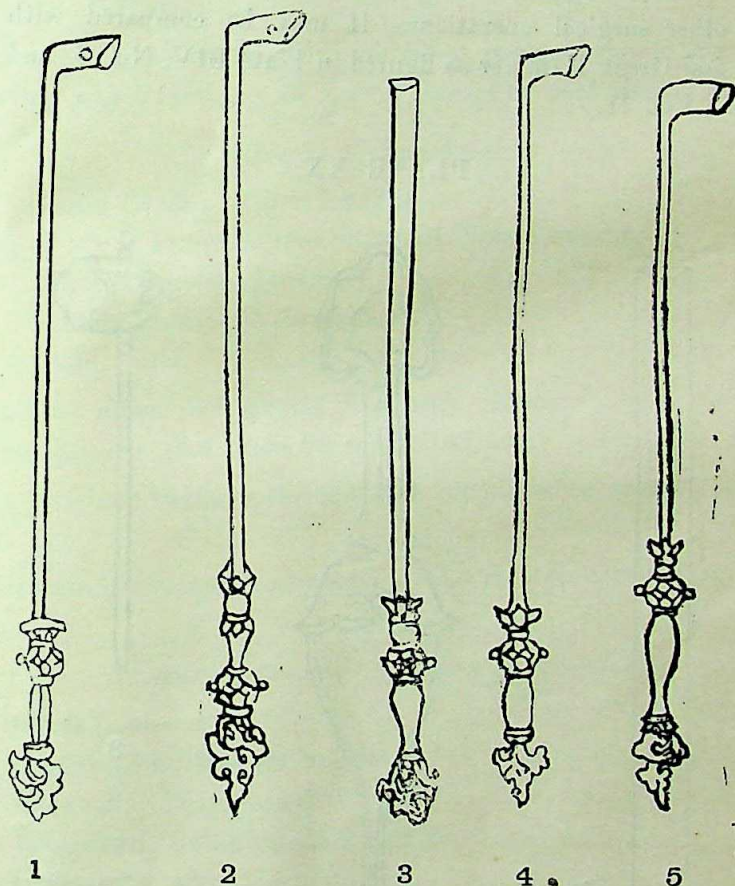


PLATE 20.

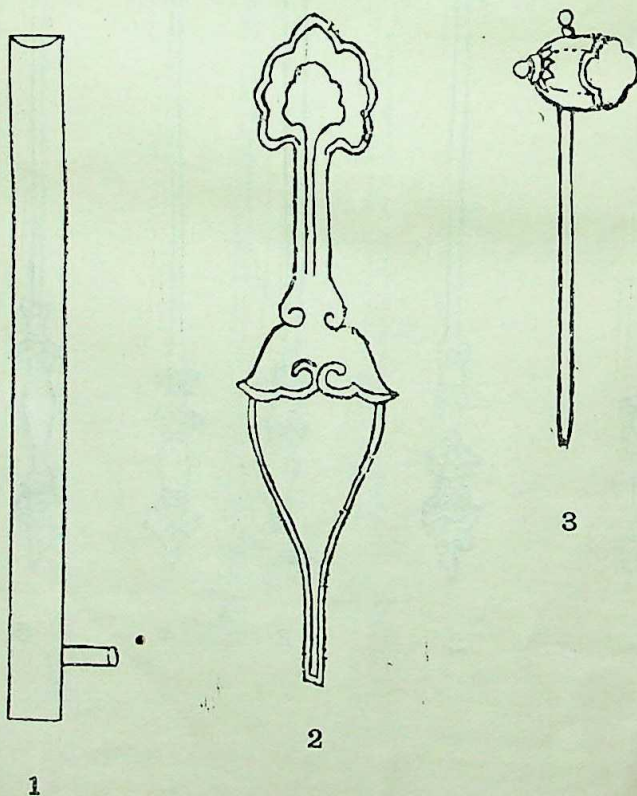
| | |
|--------------|--------------------------------|
| New number 1 | — No. 27 of original Plate II. |
| " " 2 | — " 21 " " " " |
| " " 3 | — " 16 " " " " |

New number 1 seems to be an uterine tube to wash the vaginal and uterine cavities.

No. 2 is a syringe for the introduction of medicated water and injections for washing cavities and for throwing in enema and uttaravasti. It may be compared with the Vrana-Vasti or wound syringe (plate XXV, vasti yantra or rectal clyster (plate no. XXX, XXIX, XXXI of S. I. H., Vol. II.)

No. 3 is a mudgara to be used in the operation of vene-section, and in other surgical operations. It may be compared with the Hindu and Greek Hammer as figured in Plate LIV, No. 5 and 6 in S. I. H., Vol. II.

PLATE XX.



FEVER IN AYURVEDA

BY

KAVIRAJ A. C. KAVIRATNA

*Calcutta.**(Continued from our July issue.)**Treatment of Vata-slesmic type of fever:*

Symptoms—

1. Sleepiness
2. Headache
3. Cough
4. Sweat

In the Vata-slesmic type of fever patient should be kept on fasting and Panchakol decoction should be prescribed.

Recipes of Panchacol:

| | |
|--|--------------------|
| Long Pepper (Piper Longum) | $\frac{1}{4}$ Tola |
| Root of Long Pepper (Root of Piper Longum) | $\frac{1}{4}$ " |
| Chai (Camellia Theifera) | $\frac{1}{4}$ " |
| Chita (Plumbago Zeylanica) | $\frac{1}{4}$ " |
| Add Aqua | 1 lb. |

Boil the above over gentle fire and reduce it to 4 oz. and then strain through a linen for medicinal use.

To be given twice or thrice a day according to severity of the case.

Kiratadi decoction is also very useful in Vata-slesmic type of fever.

Recipes of Kiratadi decoction is as under:

| | |
|--|--------------------|
| Creat (Chirayetta) | $\frac{1}{4}$ Tola |
| Ginger (Zingibar officinallis) | " |
| Gulancha (Tinospora Cordifolia) | " |
| Kantakari (Solanum Zanthocarpem) | " |
| Brihati (Solanum Indicum) | " |
| Root of Long Pepper (Root of Piper Longum) | " |
| Garlic (Allium Sativum) | " |
| Nisinda leaf (Vitex Trifolia) | " |
| Add Aqua | 1 lb. |

Boil the above over gentle fire and reduce it to 4 oz. and then strain through a linen for use.

To be administered twice a day.

Copious perspiration is usually marked in Vata-slesmic type of fever which is debilitating. The perspiration in such cases should be stopped without loss of time. Cowdung ash and the salted earthen ware in equal parts should be pulverized and used as dusting powder all over the body. It will check perspiration. It could well be controlled from the use of fried Kulatha-Kalai (*Dolichos Biflorus*) powder.

Treatment of Pitta-slesmic type of fever.

Nine days fasting is recommended in Pitta-slesmic type of fever and Guruchyadi decoction should be prescribed. Sometimes Nagaradi decoction is also very useful.

Recipes or Guruchyadi decoction:

| | |
|---|--------|
| Gulancha (<i>Tinospora cordifolia</i>) | ½ Tola |
| Neem Bark (<i>Mergosa</i> Bark) | " |
| Dhania (<i>Coriandar</i>) | " |
| Red Sandal Wood (<i>Pterocarpus Santalinum</i>) | " |
| Katki (<i>Black Hellebore</i>) | " |
| Add Aqua | 1 lb. |

Boil it over a gentle fire and reduce it to 4 oz. Then strain through a linen for use. To be administered twice a day.

Recipes of Nagaradi decoction :

| | |
|--|--------|
| Ginger (<i>Zingibar Officinallis</i>) | ¼ Tola |
| Bena Root (<i>Fragrant Grass Root</i>) | " |
| Bael Bark (<i>Aegle Marmelos</i>) | " |
| Mutha (<i>Gyperus Rotundus</i>) | " |
| Dhania (<i>Coriandar</i>) | " |
| Mochrasa (<i>Gum of Kurchi</i>) | " |
| Bala (<i>Povania Odorata</i>) | " |
| Add Aqua | 1 lb. |

Boil the above over fire and reduce it down to 4 oz. and then strain through a linen for use. To be given twice or thrice a day.

Treatment of Vata Pitta type of Fever:

Symptoms and pulse of this type of fever have already been described in the foregoing pages and only the treatment would be dealt with.

In this type of fever it is advisable to keep the patient on fast for four days and then to prescribe "Kiratadi Kwath,"

Recipes of "Kiratadi Kwath":

| | |
|---------------------------------|--------|
| Chirayta (Creat) | 1 Tola |
| Guloncha (Tinospora Cordifolia) | 1 " |
| Draksha (Vitis Vinifera) | 1 " |
| Amlaki (Embelic Myrobalan) | 1 " |
| Sothi (Curcuma Zarumbet) | 1 " |
| Aqua | 1 lb. |

Boil the above over gentle fire and reduce it to 4 oz,

To be administered with two tolas of old treacle.

In case there is constipation and headache, prescribe "Triphaladi Kawth."

Recipes of "Triphaladi Kawth"

| | |
|--------------------------------------|----------|
| Haritaki (Terminalia Chebulic) | 1/4 Tola |
| Amlaki (Embelic Myrobalan) | 1/4 " |
| Bayera (Embelia Belirica) | 1/4 " |
| Simul Bark (Eriodendron Aneraonosum) | 1/4 " |
| Rasna (Vanda Roxburghie) | 1/4 " |
| Sondal Bark (Cassia Fistula) | 3/4 " |
| Basaka Bark (Adhatoda Vasaka) | 1/4 " |
| Aqua add | 1 lb. |

Boil it over gentle fire and reduced it to 4 oz. The decoction thus prepared should be strained through a linen for use- To be administered twice a day.

Mrityunjaya Rasa should be prescribed with cocoanut water and sugar in Vata-Pitta-azar twice or thrice a day.

Recipes of Mrityunjaya Rasa :

सूतं गन्धटङ्कनं शुभं विषं धुस्तरवीजं कटुम् ।
 नीत्वा भाग्यद्योत्तावद्विगुणितञ्चोन्मत्तमुलुम्बना
 कुश्यान्माषवटीं सुखातिसुखदां सर्वान् ज्वरान् नाशये-
 देश श्रीशिवशासनात् प्रजनितः सूतश्च मृत्युञ्जयः
 नारिकेलसितायुक्तं वातपित्तज्वरं जयेत्
 मधुना श्लेष्म-पित्तोत्थं ज्वरं संनाशयेद् ध्रुवम् ।
 सन्निपातज्वरं चोरं नाशयेदाद्र्दनीरतः

| | |
|--------------------------------|--------|
| Purified Mercury (Hydrargyrum) | 1 Tola |
| Purified Sulphur | 2 " |
| " Borax (Sohaga) | 4 " |
| " Mitha (Aconite Ferox) | 8 " |

| | |
|---|------|
| Purified Dhutura Seed (Seed of Datura Fastuasa) | 16 „ |
| Pulv. Trikatu (Compound of Soonth, Pipul and Marich) | 32 „ |

Rub the above together in Dhatura root Juice and prepare pills of 15 grains each to be administered twice a day with cocoanut water and sugar.

Therapeutic action of the ingredients:—

Corrected Mercury (Hydrargryum)—Antiseptic, Lalabardhaka (sialagogue), Mriduvedaka (Cholagogue), tonic and alterative. In small doses it stimulates the secretion of biles, liver and cells. It is antipyretic and is widely used in fevers of all description.

„ Sulphur—It is bitter and astringent and is widely used with Mercury in almost all diseases. It is alterative (paribartaka), tonic, laxative, diuretic and insecticide and stimulates the secretion of liver, kindeys, skin and mucous membrane.

„ Mitha (Aconite Ferox)—Diaphoretic, diuretic, antidiabetic, antipyretic. It reduces tension and frequency of the pulse and is a sedative for the respiratory centre. In large doses it is a powerful sedative.

„ Dhatura (Datura Fastuasa)—Antipyretic and anti-spasmodic.

Trikatu (Compound of Dry Ginger, Long Pepper and Black Pepper)—Aromatic, carminative, stomachic, digestive, antiperiodic, diuretic, expectorant and resolvent of phlegm.

Sree Mrityunjaya may also be used in Vata and Pitta type of fever with cocoanut milk and sugar. Half a pill per dose should be given to children and old people and one pill to adult. The action of the ingredients has already been described in the foregoing pages.

Bata-Pittantaka Rasa should be prescribed if there is burning sensation with frequent desire for water attended with exhaustion and loquacity.

Recipes of Vata Pittantaka Rasa :—

R/

सुतसूताधसुसार्क-तीक्ष्णमाचिकतालकम्
 गन्धकं मर्दयेत् तुल्यं यष्टिद्राचासुतारसैः
 धात्रीशतावरौद्रावैद्रावैः चौरविदारिजेः
 दिनं दिनं विभाज्याथ सिताचौद्रयुतावटी
 माषामावा निहन्त्याथ वातपित्तज्वरं क्षयम्
 दाहं दृष्णां भ्रमं शोषं वातपित्तान्तको रसः
 सिताचौरं पिवेच्चानु यष्टिक्वाथ-सितायुतम् ॥

Purified Mercury (Hydragryum),

„ Sulphur.

„ Mica (Albuminium Silicate)

Pulv. Mulathi (Cyperus Rotundus)

Purified Copper (Cuprum)

„ Iron (Ferrum)

„ Swarnamakshika (Ferri Sulphuretum)

„ Harital (Trisulphuret of Arsenic)

Take equal parts of the above ingredients and apply juice of Jaistamadhu (Liquorice root), Kismis (Rasin), Guduchi (Tinospora Cordifolia), Amlaki (Embelic Myrobalan), Satamuli (Asparagus Racemosus), and Bhumi Kumra (Ipomoea Digitata) separately for a day each in *Vavana* process and rub well together into a mass to prepare pills of small pea size. This medicine should be used with sugar and honey and the patient should be advised to drink warm cow's milk with sugar or if the milk is not tolerated administer Liquorice root (Jaistamadhu) decoction with sugar.

It arrests exhaustion, burning sensation, thirst, forgetfulness and debility manifested in thermic type of fever.

Therapeutic action of the ingredients is as under :—Action of corrected Mercury, Sulphur and Aconite Ferox has already been described under *Mrityunjaya Rasa*.

Reduced Mica (Albuminium of Salicate)—Astringent, alterative, and stimulant. It stimulates metabolic action of tissue cells and is useful in urinary diseases, debility, anaemia, Jaundice, asthma, consumption, gonorrhoea, leucorrhoea etc.

Mulathi (Cyperus Rotundus)—Diuretic, diaphoretic, astringent, tonic, stimulant, vermifuge, and emmenagogue. It is useful in fever and cachexia.

Corrected Iron (Ferrum)—Useful in anaemia, chlorosis, dropsy, chronic intermittent fever, bleeding piles, haemoptysis, leucorrhœa, albuminuria, chronic dyspepsia, sluggish liver, enlarged spleen, intestinal worms etc. It enriches blood and strengthens the cells.

Corrected Swarnamakshika (Ferri Sulphuretum)—Tonic, alterative. It is efficacious in anaemia leucorrhœa, ascites, urinary diseases, rheumatism, gonorrhœa, heart diseases, hysteria, lumbago and diseases of the eyes.

Corrected Harital (Trisulphuret of Arsenic)—Febrifuge, alterative, parasiticide, anti-pyretic, anti-periodic. It is efficacious in facial paralysis, asthma, phthisis, catarrh, paraplegia hemiplegia, dropsy and diseases of the skin in general as an external ointment.

Jaistamadhu (Liquorice root or Glycyrrhiza Glabra)—Refrigerant, demulcent, expectorant, diuretic, emmenagogue and gentle laxative.

Kismis (Vitis Vinifera)—Refrigerant, diuretic, cooling, laxative, expectorant, nutritive, blood purifier and is useful in bilious fever, bronchitis, catarrh, consumption and Jaundice.

Guduchi (Tinospora Cordifolia)—Antiperiodic, mild diuretic, stomachic, bitter, tonic, anti-bilious, stimulant, alterative and aphrodisiac. It is useful in *Pitta-azar* (bilious fever) and *Slesmic Fever* (Catarrhal fever) and urinary diseases. In Malarial fever with or without enlargement of spleen it is more efficacious than quinine. It is invaluable in cachexia and anaemia, very efficacious in painful micturition and diseases of the skin.

Amlaki (Embelia Myrobalan)—Laxative, diuretic, refrigerant, vermifuge, expectorant, and digestive. It is invaluable in dyspepsia, jaundice, anaemia, biliousness. In ophthalmic diseases it is used as a collyrium with success.

Satamuli (Asparagus Racemosa)—Tonic, nutritive, demulcent, antispasmodic, aphrodisiac and lactagogue. It is highly efficacious in involuntary emission and general debility.

Bhumikusmanda (Ipomoea Digitata)—Tonic, aphrodisiac, demulcent, lactagogue and restorative.

For Santa-azar (Remittent type of fever) prescribe the following :—

| | | |
|----|-----------------------------|---------|
| R/ | Indrajab (Kurchi seed) | gr. 120 |
| | Palta (Hemidesmus Indica) | „ 120 |
| | Katki (Black Hellebore) | „ 120 |
| | Aqua add | 1 lb |

Boil the above over gentle fire and reduce it to 4 oz. To be given thrice a day till the fever is arrested.

The therapeutic action of the ingredients is as under :—

Indrajaba (Holarrhena Antidysenterica)—Bitter, stomachic, astringent, febrifuge, anthelmintic, anti-dysenteric and anti-periodic. Many are of opinion that Kutaja seed is aphrodisiac and tonic. Kutaja bark and seed are highly extolled for their curative virtues for acute and chronic dysentery.

Palta (Stereospermum)—Antacid, anti-bilious, carminative, digestive, refrigerant, aphrodisiac, stimulant, febrifuge, vermifuge and expectorant.

Katki (Helleborus Niger)—Bitter, tonic, febrifuge, emmenagogue, anthelmintic, cathartic, hydrogogue and cardiac tonic like Digitalis. In large doses it paralyzes the heart and causes death. It is indicated in apoplexy, epilepsy, dropsy, mania, melancholia, worms and affection of the skin.

For Satata-azar (Double Quotidian type of fever) prescribe the following :—

| | |
|----|------------------------------------|
| R/ | Palta (Hemidesmus Indica) |
| | Anantamool (Indian Sarsaparila) |
| | Mustaka (Cyperus Rotundus) |
| | Akanadi (Stepania Hernandifolia) |
| | Katki (Picrorrhiza Kurroova) |

Take equal parts of the above ingredients weighing 2 tolas in all, boil these together in 1 lb of water down to 4 oz. To be administered twice a day till the fever disappears.

Therapeutic action of the ingredients is as under :—

Palta (Stereospermum)—Antacid, anti-bilious, carminative, digestive, refrigerant, aphrodisiac, stimulant, febrifuge, vermifuge and expectorant.

Anantamool (*Hemidesmus Indicus*)—Dimulcent, diaphoretic, diuretic, valuable alterative and blood purifier. It is an appropriate substitute for Jamaica Sarsaparilla.

Mutha (*Cyperus Rotundus*)—Diuretic, diaphoretic, astringent, tonic, stimulant, vermifuge, emmenagogue. It is useful in fever and cachexia.

Akanadi (*Stephania Hermandifolia*)—Diuretic, bitter tonic, anti-lithic, astringent and sedative for the mucous membranes of the genito-urinary organs. It is prescribed in fever, diarrhoea, dysentery, acute and chronic cystitis and affection of the bladder.

Katki (*Helleborus Niger*)—Bitter, tonic, febrifuge emmenagogue, anthelmintic, cathartic, hydrogogue and cardiac tonic like digitalis. In large doses, it paralyzes the heart and causes death. It is indicated in apoplexy, epilepsy, dropsy, mania, melancholia, worms and affection of the skin.

For Annya-Duska (Quotidian type of fever) prescribe the following decoction :—

R/

Neem Bark (*Azadirachta Indica*)

Palta (*Trichosanthes Dioica*)

Triphala (Compounds of Three Myrobalans)

Draksha (Grapes)

Mustaka (*Cyperus Rotundus*)

Indrajaba (*Kurchi Seed*)

Take equal parts of the above ingredients weighing 2 tolas in all and boil these together down in 1 lb of water to 4 oz. To be given twice a day.

Therapeutic action of the ingredients is as under :

Neem Bark (*Azadirachta Indica*)—Cooling, stomachic, astringent, discutient, anthelmintic, antiseptic, insecticide, and febrifuge. Even the European authorities testified to its anti-malarial properties as well as its effectiveness in the treatment of intermittent fever as Cinchona and Arsenic.

Palta (*Stereospermum*)—Antacid, antibilious, carminative, digestive, refrigerant, aphrodisiac, stimulant, febrifuge and expectorant.

Triphala (Compound of Terminalia Chebula, Embelica Myrobalan and Terminalia Belirica)—Very efficacious purgative, astringent, alterative, anti-bilious, expectorant and antacid. It is efficacious in fever, cough, asthma, piles, worms, rheumatism, urinary diseases, chronic diarrhoea, dyspepsia, flatulence, colic, vomiting, nausea, and ophthalmia.

Draksha (Vitis Vinifera)—Refrigerant, diuratic, cooling, laxative, expectorant, nutritive, blood-purifier, lung tonic, anti-catarrhal, useful in cough, asthma and Jaundice.

Mustaka (Cyperus Rotundus)—Diuretic, diaphoretic, astringent, tonic, stimulant, vermifuge, emmenagogue. It is useful in fever and cachexia.

Indrajaba (Hollarrhena Antidysenterica)—Bitter, tonic, stomachic, astringent, febrifuge, anthelmintic, anti-dysenteric, and anti-periodic. It is extolled for its curative virtues in chronic as well as acute dysentery.

For Malarial fever, prescribe Malorina, Panchatiktasar, Guruchyadi Churna, Pleehari Rasa, Pleehantaka Rasa, Mohamrityunjaya Lauha, Loknath Rasa and Brihat Loknatha Rasa etc. according to the prevailing necessity of the patient:—

Recipes of Malorina :

R/

- Gulancha (Tinospora Cordifolia)
- Gambhari Bark (Gmelina Arborica)
- Parul Bark (Streospermum Suavelens)
- Bael Bark (Aegle Mamelos)
- Ganiari Bark (Chelorioides)
- Salpani (Desmodium Gangeticum)
- Chakule (Hemionities Cordifolia)
- Kantakari (Solanum Janthocarpum)
- Gokshura (Tygophyllia Tribulus terrestris)
- Khetpapra (Oldendia Corymbosa)
- Chirayetta (Creat)
- Ataich (Atis Radix)
- Indrajaba (Kurchi seed)
- Daruharidra (Berberung)
- Red Sandal Wood (Pterocarpus Santalinum)
- Chhatim Bark (Alstonia Axholaris)

Nata (Bonduct Nut)
 Kuchila (Nuxvomica)
 Haritaki (Chebulic Myrobalan)
 Iron

Boil the above together over a gentle fire in 120 seers of water and reduce it to 32 seers ; soak the decoction through a linen and then put in an earthen Jar adding honey 12 seers.

The Jar should be tightly corked, covered with a lid and plaster of clay and allowed to remain there undisturbed for 30 days when the decoction should be used for medicinal purpose in doses of $\frac{1}{2}$ to 1 Oz.. It is useful in intermittent fever with enlarged spleen, liver and anaemia attended with burning of eyes and extremities. In small doses it is an excellent tonic and would be a better substitute for quinine in chronic fever. Vide writer's book of Manual of Prescription in Ayurveda.

Therapeutic action of the ingredients is as under :

- Gulanchara (Tinospora Cordifolia)—Anti-periodic, mild diuretic, stomachic, bitter tonic, anti-bilious, stimulant, alterative, and aphrodisiac. It is efficacious in pitta-azar (bilious type of fever) as well as in slesmic fever (Catarrhal type of fever) and urinary diseases. This is more efficacious than quinine in Malarial fever with or without enlargement of the spleen. It is invaluable in cachexia and anaemia ; very useful in painful urination and diseases of the skin.
- Gambhari Bark (Gmelina Arborica)—Demulcent, refrigerant, laxative, stomachic, tonic, lactagogue. It is useful in remittent type of fever and bilious fever.
- Parul Bark (Streospermum Suavelens)—Refrigerant, demulcent and diuretic ; useful in dyspepsia, fever, cough and dropsy etc.
- Bael Bark (Aegle Mermelos)—Febrifuge, cardiac tonic, anti-bilious and anti-dysenteric.
- Ganiari Bark (Premna Integrifolia)—Stomachic, carminative, alterative tonic ; useful in eruptive fever, colic, biliousness, rheumatism and neuralgia.
- Chakula (Hemionites Cordifolia)—Aphrodisiac, tonic, stimulant and equaminates Vayu, Pitta and Cough.

- Salpani (*Hedysarum Gangeticum*)—Febrifuge, anti-catarrhal, and alterative bitter tonic. It is indicated in remittent type of fever and inflammatory affection in the chest.
- Kantikari (*Solanum Jacquirii*)—It is efficacious in fever, asthma, cough, pain in the chest, dropsy, costiveness, catarrhal fever and low vitality.
- Gokshur (*Tribulus Terrestris*)—Cooling, demulcent, diuretic, tonic, and aphrodisiac. It is widely used in diseases of the genito-urinary system *viz* Gonorrhœa, gleet, chronic, cystitis, spermatorrhœa, phosphaturia, impotency, bloody urine, or in suppression of urine.
- Khetpapa (*Oldenlandia Corymbosa*)—Febrifuge and is highly efficacious in remittent type of fever with temperature and gastric irritability and nervous depression.
- Chirayetta (*Kariyat*)—It is valuable tonic for general debility after fever and virulent attack of dysentery. It is aperient in dyspepsia attended with torpidity of bowels.
- Ataich (*Aconite Hetrophyllum*)—Bitter tonic, febrifuge, stomachic, aphrodisiac, anti-periodic. It is used in fever attended with diarrhœa, cough or torpidity of bowels.
- Indrajab (*Holarrhena Antidysenterica*)—Bitter, stomachic, astringent, febrifuge, anthelmintic, anti-dysenteric, anti-periodic, alterative, stomachic, astringent, tonic, and liver regulator. It is prescribed in remittent and also in intermittent fevers. In combination with other diuretics, its action is excellent in urinary diseases and painful micturition.
- Daruharidra (*Berberis Aristata*)—It is anti-bilious, anti-pyretic, anti-periodic, alterative, stomachic, astringent, tonic, and liver regulator. It is prescribed in remittent and also in inter-mittent fevers. In combination with other diuretics, its action is excellent in urinary diseases and painful micturition.
- Red Sandal Wood (*Pterocarpus Santalinus*)—It is mild, astringent, tonic, haemostatic, emmenagogue. It is very useful in hæmorrhage, bleeding piles, headache etc. Besides, it is soothing, insecticide and parasiticide and removes irritability in the genito-urinary tract.
- Chhatim Bark (*Alstonia Scholaris*)—Bitter tonic, expectorant, febrifuge, aphrodisiac, stimulant, carminative, antiperi-

odic. It is considered equal to the best Quinine Sulp without disagreeable complications or bad after-effect.

Nataphal (Cæsalpinia Bonduc Nut)—It is febrifuge, anti-periodic, antispasmodic, bitter tonic, anthelmintic. It is invaluable in remittent as well as in inter-mittent fevers, asthma, and colic. It is used as a local ointment with excellent result to reduce the acute congestion, glandular swelling, such as orchitis, hydrocele etc.

"Corrected" Kuchila (Strychnes Nuxvomica)—Febrifuge, cardiac and nervine tonic, aphrodisiac, and stimulant. In action it is equivalent to strychnine but less toxic in action. It is efficacious in chronic dyspepsia, chronic dysentery, hysteria, worms, neuralgia, gout, rheumatism and hydrophobia.

Haritaki (Terminalia Chebula)—Effective purgative, astringent, alterative, anti-bilious, expectorant, antacid, and digestive. It is efficacious in fever, cough asthma, piles, worms, rheumatism, urinary diseases, diarrhœa, dyspepsia, flatulence, colic, ophthalmia. Besides it is insecticide and parasiticide.

Iron (Ferrum)—Powerful tonic, alterative, astringent, excellent restorative. It stimulates the functional activity of the organs of the body and enriches the properties of blood. It is useful in anæmia, dropsy, torpidity of liver and spleen. In Ayurveda, reduced iron is widely used in hæmorrhagic diseases, *viz* hæmoptysis, bleeding piles, phthisis, Scrofula and wasting diseases in general. In chronic intermittent or slow fever with anæmia and enlargement of spleen it is of invaluable service. Besides, in almost all diseases in combination with other suitable vegetable drugs it could be prescribed with success.

Recipes of Panchatikhtasar :

R/

| | |
|-------------------------------------|--------|
| Reduced Iron (Ferrum) | Gr. 11 |
| Hirakash (Ferri Sulp) | " I |
| Pulv. Ginger (Zingibar Officinalis) | " 11 |
| " Gulancha (Tinospora Cordifolia) | " 11 |
| " Chirayetta (Creat) | " 11 |
| " Neem Bark (Azadirachta Indica) | " 11 |

| | |
|------------------------------|-------------------|
| Corrected Hing (Asafoetida) | Gr. $\frac{1}{2}$ |
| Pulv. Nataphal (Bonduct Nut) | „ II |
| „ Ataich (Atis Radix) | „ I |

Rub them together in a mortar to fine trituration. To be given twice or thrice a day in doses of 5 to 10 grains. This is a tonic of choice and febrifuge of supreme efficacy with pain in body and debility.

Therapeutic action of the ingredients :

Reduced Iron (Ferrum)—Powerful tonic, alterative, astringent and restorative, improves quality of blood and stimulates the functional activity of all the organs of body and that is the reason why it is extolled as an excellent restorative.

Hirakash (Ferri Sulp)—Tonic, alterative ; prescribed in anæmia, leucorrhœa, ascites, anasarca and urinary diseases, lumbago, hysteria, rheumatism and syphilitic ulcers.

Ginger (Zingibar Officinalis)—Aromatic, Carminative, Stomachic, digestive, sialagogue and stimulant.

Gulanha (Tinospora Cordifolia)—Antiperiodic, diuretic, anti-bilious, anti-catarrhal. It is a good substitute for Quinine in malaria and unlike Quinine it is free from bad complication.

Chiraeytta (Karyat)—It is a valuable tonic for general debility after fever and virulent attack of dysentery. It is prescribed in dyspepsia with constipation.

Neembark (Azadirachta Indica)—Antiperiodic, vermifuge, stimulant, insecticide, antiseptic, stomachic and antifebric.

Corrected Hing (Asafoetida)—Antispasmodic, carminative, expectorant, laxative, diuretic, emmenagogue, anthelmintic and aphrodisiac ; useful in flatulence, enlargement of spleen, diarrhoea, dyspepsia painful urination, hysteria, colic, fainting, nervous palpitation, whooping cough, obstinate cough of children, chronic bronchitis, asthma, worms, hemicrania and regulates liver and prevents abortion from its regular and continuous use.

Nataphal (Bonduct Nut)—Febrifuge, antiperiodic, antiseptic and anthelmintic. Very useful in fevers, asthma and colic. Externally its ointment with Aronda oil (castor oil) in glandular swelling is *par excellence*.

Ataich (Atis Radix) - Stomachic, antiperiodic, bitter tonic, febrifuge, and aphrodisiac. Very useful in fever with looseness of bowels.

क्षणे दाह क्षणे शीतमस्थिसन्धि शिरोरुजा ।
 सखावे कलुषे रक्ते निर्भूये चापि लोयने ।
 स्वस्वनौ सरुजौ कण्ठे कण्ठः शूकरैर्वाहतः
 तन्द्रा भोहः प्रलापश्च कासः श्वासोऽरुचिभ्रमः ।
 परिदग्धा स्वरप्यर्शा जिह्वा स्रस्ताङ्गता परम् ।
 ह्रीवनं रक्तपित्तस्य कफेनीन्मिश्रितस्य च ।
 शिरोसो लोठनं दृष्ट्वा निद्रानाशो हृदि व्यथा ।
 खेदमुख पुरीषानां चिराद्यर्शनमल्पशः ।
 क्लृप्तं नाति गात्राणां प्रततं कण्ठकुजनम् ।
 कीठानं श्ववरक्तानां मलानाञ्च दर्शनम् ।
 मुक्त्वं स्रोतसां पाको गुरुत्वमुदरस्य च ।
 चिरात् पाकश्च दोषाणां सन्निपातज्वराकृति ॥

Symptoms of Sannipata type of fever :—

1. Heat and chill in alteration.
2. Aching pain in joints of limbs and head.
3. Eyes filled with water and looked red, pale or wild and eye-balls fixed.
4. Pain in ears with uneasy buzzing or reeling sound.
5. Tinckling sensation in the throat with constricted feeling.
6. Loquacity and delirium.
7. Cough or Croup.
8. Dyspnoea.
9. Aversion to food.
10. Forgetfulness.
11. Tongue is black like coal or charcoal and coarse like the tongue of cow.
12. Limbs are relaxed or paralysed.
13. Watering of mouth with phlegm mixed up with blood or bile or with both.
14. Involuntary movement of head.
15. Thirst for water.
16. Sleeplessness.
17. Pain in the body and heart.
18. Retention of urine, perspiration and faeces or the secretion of these is scanty and at long intervals.

19. General appearance of the patient does not look as thin as it should be.
20. Peculiar sound in throat is generally present.
21. Red spots or rash of circular shape appear on the skin and
23. Fullness in the stomach and abdomen with rapidity of respiration.

Sannipataja type of fever is a very dangerous disease and its treatment is rather too wide in Ayurveda. Here the disease would be dealt with in a comprehensive way so that the readers may have a clear conception in a nut-shell. The disease and its manifestation coincide with either Pneumonia, Typhoid, Enteric fever or Plague commonly known to the general people.

(To be continued.)

GYNÆCOLOGY, OBSTETRICS, AND PEDIATRICS OF THE AYURVEDISTS

BY

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(Continued from our July issue)

II. Diseases due to Derangement of Pitta.

(IX). PITTALA; Syn.—*Pittaja-Yoni* (Vaginitis). There is burning sensation and suppuration in the organ, and fever (Su). The aggravation of Pitta due to indulgence in excess of sour, saline or acrid foods and drinks causes burning pain, suppuration, and formation of ulcers in the vagina; there is a feeling of intense heat and fever; the discharge is blue or white, is hot and has a decomposition smell (Ch).

General Treatment :—(1) Cook with 64 parts of each of ghee and oil, 356 parts of decoction of *Sida carpinifolia* roots, 128 parts of milk, and one part each of *Piper longum* fruit, *Gmnelia sylvestre*, *Coclogyne ovalis*, *Desmodium gangeticum*, *Cuminum Cuminum*, *Holastema Rheedii*, *Phaseolus trilobus*, *Clematis triloba*, *Grangea madraspattana*, 'Kshirakakoli,' 'Ridhi' and sugar; give by mouth (Va); (2) give treatment of Hæmorrhagic Diathesis (*Rakta-Pitta*), and cooling remedies to alleviate Pitta (Ch).

Local Treatment :—The treatment consists of sprinkling, rubbing, and inserting in the vagina a cotton-swab soaked with drugs that are cooked with or without oil, and are cooling and sedative of *Pitta*; (1) insert in the vagina a paste of the barks of the five species of *Ficus*; (2) give enema of drugs of 'Sweet' group with milk (Ch.); (3) in case of purulent discharge, insert in the vagina a bolus of disinfectant drugs pasted with cow's urine and saturated with salt (Su.).

(X). PUTRAGHNI; Syn.—*Jataghni* (Chronic Endometritis):—There are repeated abortions, and excessive discharge of 'Menstrual Fluid' occurs during gestation (Su.) *Vayu* on account of its property of 'dryness' kills a fœtus, born of vitiated and dry 'Menstrual Fluid' as often as is born (Ch.).

Local Treatment :—Give a vaginal douche of ghee boiled with *Gmelina arborea* seeds or roots and *Holarrhena antidysenterica* bark (Ch.).

(XI). ARAJASKA-YONI (Amenorrhœa):—The blood is deranged on account of aggravation of *Pitta* in the vagina and uterus; there is great emaciation, and much pallor as well (Ch.)

General Treatment :—(1) Drink blood of deer, goat, sheep, and boar, with curd, conjee, honey, and ghee; (2) drink milk cooked with drugs of 'Jivaniya' group (Ch.).

(XII). LOHITAKSHARA, *Lohitakshaya* (Va.), (Amenorrhœa? scanty Menstruation):—There is discharge of 'Menstrual Fluid' with a burning sensation (Su.). *Vayu* and *Pitta* are aggravated; menses are small in quantity; there is burning sensation in the body, emaciation, and paleness (Va.).

(XIII) APRAJA-YONI; Syn.—*Rakta-Yoni*, *Rakta-Pradara* (Metrorrhagia, Chronic Endometritis, Cervical Erosions) —Indulgence in foods and drinks aggravates both the 'Blood Principle' and *Pitta* (Hæmorrhagic Diathesis); the 'Blood' is vitiated by the deranged *Pitta*; there is excessive vaginal discharge of blood, even though the woman be pregnant (Ch.).

Local Treatment :—Ghee boiled with seeds of *Gmelina arborea*, *Holarrhena antidysenterica* bark should be given as vaginal enema (Ch.).

(XIV). PRASRAMSINI (Prolapse of the Vagina or Uterus):—There is prolapse of the vagina or uterus, and parturition is difficult and painful (Su.).

Local Treatment :—(1) Foment with hot milk, rub ghee and reduce the prolapse; apply a poultice of the paste of boneless meat mixed with ghee, *Piper longum* and *Piper nigrum* (*Veshawara*) and bandage; (2) a skilled midwife should reduce the prolapse; massage it with oil medicated with *Saraca indica*, *Soymeda febrifuga*, *Andropogon muricatus*, *Aglaia Roxburghiana*, *Cedrus Deodara*; and fill the vagina with the paste of the same (Su.).

(XV). VAMINI :—‘Menstrual Fluid’ and ‘Semen’ are ejected with sound (Su.). There is aggravation of both *Vayu* and *Pitta*; ‘Semen’ which has entered even the uterus is thrown out even after six or seven days, with or without pain in the generative organs (Ch.).

Treatment :—(I) Oleaginous treatment (*Snehana*), fomentations, emetics, etc. are beneficial; (2) insert in the vagina a cotton-swab soaked in oil and ghee (Ch.).

III. Diseases due to Derangement of Kapha.

(XVI). SHLESHMALA; Syn.—*Kaphaja-Yoni*, *Shleshmaki*, (Leucorrhœa, Chronic vaginitis):—There is a sensation of coolness in the vagina, local itching, diminished sensibility, and slimy discharge (Su.). Aggravation of Kapha due to indulgence in food and drinks of inspissating virtues causes the vagina to feel cold and slimy; there is itching sensation and mild pains; the mucosa is pale and there is whitish slimy discharge (Ch.).

General Treatment :—Give dry and heating remedies (Ch.).

Local Treatment :—(I) Insert in the vagina strips of lint soaked several times in (a) pig’s bile; or (b) in *Phaseolus radiatus* flour and a little salt treated several times with juice of *Euphorbia nerifolia*; wash the vagina repeatedly with hot water and insert the strip each time; (2) insert in the vagina sticks made of *Piper longum* fruit, *Piper nigrum*, *Phaseolus radiatus*, *Peucedanum graveolens* seeds, *Saussurea Lappa*, and ‘Saindhava’ salt; (3) soak in 32 parts of water for one night 16 parts of the powders of dry raw fruits of *Ficus Glomerata*, 16 parts of bark of *Ficus benegalensis*, *F. infectoria*, *F. glomerata*, *F. religiosa*, and *Calamus Rotang*, leaves of *Trichosanthes dioica*, leaves of *Echites caryophyllata*, and of *Melia Azadirachta*; to this cold infusion add the paste of the exudation of lac, bark of *Conocarpus latifolius*, bark and gum of *Butea frondosa* and gum of *Bombax malabaricum* and cook with one part of oil; insert in the vagina a cotton-swab soaked in this oil; (4) add sugar to the above cold infusion and wash the vagina with it; within seven days of application of this oil, the vagina that

is slimy, putrid or dilated, shattered and lacerated from any cause, is cured; conception occurs soon after; (5) soak sesamum seeds six times in milk exudation of *Ficus glomerata*; press out the oil, and cook it with the same pulp; soak a cotton-swab in the oil and insert it in the vagina; (6) insert a warm paste of '*Ichnocarpus frutescens*' group of drugs; (7) give enema of drugs of 'Pungent' group in cow's urine (Ch.); (8) in case of *fætid and slimy secretion*,—fill the vagina with (a) powders of 'pancha-kashaya' drugs, and wash with decoction of drugs of 'Cassia Fistula' group; (9) in case of *itching and diminished sensibility*,—fumigate with fumes of *Solanum indicum*, *Curcuma longa*, *Berberis asiatica*; and use plugs of these three drug-pastes (Su.).

(XVII). KARNINI (Uterine Tumour, Descent of the Uterus, inversion of the Uterus, Vaginal Polypi):—There are hæmorrhagic growths or polypi, and discharges of vitiated blood (Su.). When a woman strains during labour even though there be no labour pains, *Vayu* overwhelmed by the fœtus combines with *Kapha* and her blood; both *Vayu* and *Kapha* cause irregular swellings on the vagina and the passage of blood is obstructed (Ch.).

General Treatment:—Give all medicines that remove derangement of *Kapha* (Ch.).

Local Treatment:—(1) A plug of a paste of cleansing drugs should be inserted in the vagina and retained (Su.); (2) insert sticks of the paste of *Saussurea Lappa*, *Piper longum*, *Calotropis gigantea* sprouts, and 'Saindhava' salt mixed with goat's urine; (3) give vaginal douche of suitable oil (Ch.).

(XVIII). ATYANANDA; Syn.—*Nanda* (Nymphomania):—There is excessive sexual desire (Su.).

(XIX). ATICHARANA (Vaginitis, Cervicitis, Pelvic Congestion):—Because of frequent sexual act, there is excessive mucous discharge, and 'Semen' is not retained (Su.). Excessive indulgence in sexual intercourse aggravates the *Vayu*; there is inflammation, numbness, and pain (Ch.).

Treat as for *Phalini* or *Prakcharana-Yoni* (No. XIII) (Ch.).

(XX). ACHARANA-YONI (Vaginitis):—There is a great quantity of muens discharge during coitus (Su.). Neglect to clean the private parts brings about infection with worms and derangement of *Vayu*; they produce an itching sensation and generate in the woman a great longing for sexual intercourse (Ch.).

(To be continued).

Reports of Societies, etc.

—:0:—

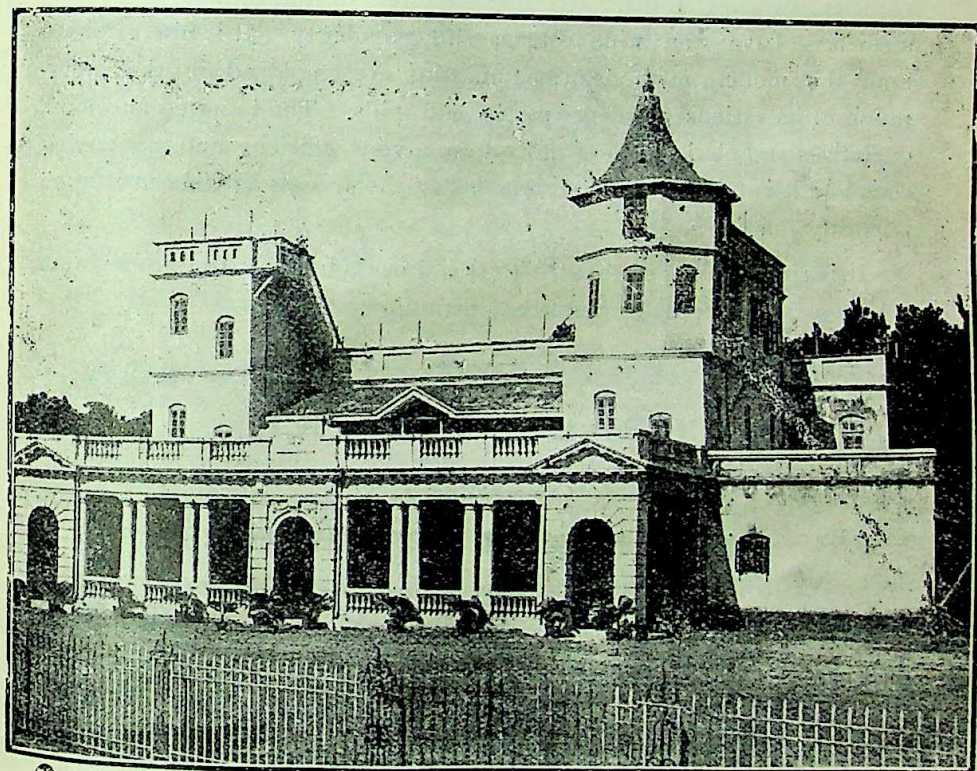
SHRI DHOOTAPAPESHWAR AYURVEDA TRUST.

PANVEL—KOLABA.

Mr. Gangadhar Vishnu Puranik and Mr. Mahadev Vishnu Puranik, proprietors of the well-known Shri Dhootapapeshwar Karkhana (Works) at Panvel have dedicated their property consisting of their residential building and cash amounting to Rs. 50,000 (Fifty thousand) to the uplift of the Ayurvedic Science in fulfilment of their father's last wish.

SHRI DHOOTAPAPESHWAR AYURVEDA TRUST, PANVEL.

श्रीधूतपापेश्वर आयुर्वेद ट्रस्ट, पनवेल ।



AYURVEDA MANDIR.

चैत्र शु. १ शके १८५५

आयुर्वेदमंदिर.

ता. २७ मार्च १९३३

The property comprises of a magnificent building, erstwhile their own residence, with an extensive compound, and out-houses, valued at Rs. 75,000 (Seventy-five thousand) and Rs. 50,000 (Fifty thousand) in cash. The authors have been actuated by a sense of duty in making the trust in as much as in doing so they are only carrying out the wishes of their

father Vishnushastri who was prevented from carrying them out himself by his untimely death in 1914. The aims and objects of the trust are multifarious, chief of which are the uplift of Ayurveda by making researches and experiments in it and establishing a school and hospital for the teaching of Ayurveda and the practical use of it in the treatment of several diseases. There are three trustees appointed with Mr. Gangadhar Vishnu Puranik as the Managing Trustee and they will be assisted in their work by an Advisory Board consisting of experienced and well-known physicians of the Ayurvedic and Allopathic Schools.

SHRI DHOOTAPAPESHWAR KARKHANA.

Shri Dhootapapeshwar Karkhana is the pioneer institution of its kind at least in Southern India, started in 1878 with a meagre capital of 30 or 40 Rs. by the late Krishnashastri, the grand-father of the proprietor. It has developed wonderfully since then and has at present a net-work of agencies all over India. Its manufactures of indigenous drugs and medicines have won wide esteem and popularity. It is interesting to know that modern methods of manufacture are employed in the preparation of its various powders, pastes and pills. The hundred and more operatives and clerks in the factory form a very efficient and contented class and it is to their skill and labour that the success of the institution is mostly due.

It is sincerely hoped that the trust will work and develop in its own sphere as satisfactorily as the parent institution.

CORRESPONDENCE.

INDIAN MEDICAL PRACTITIONERS.

To

THE EDITOR

JOURNAL OF AYURVEDA,

CALCUTTA.

Sir,

I beg to enclose a true copy of G. O. No. 1093 (P. H.) dated 19th May 1933, for favour of publication in a near issue of your Journal of Ayurveda.

It is an important G. O. by which extension is granted for two years to Indian Medical Practitioners for the purpose of registration.

According to this G. O., Medical Practitioners of Indian Medicine working in Medical Institutions under the Local Bodies are required to get themselves registered before 1st February 1935, otherwise they will have to be removed from service. The Government has reserved the right of granting exemption from registration according to this G. O. This is an amendment of G. O. No. 231 P. H. dated 1st February 1933.

In the G. O. No. 231 room was given for much agitation in the Boards and the Press to represent that Non-L. I. Ms' who have undergone 4 years course in private colleges are not eligible for the service under Local bodies. This gives a fitting reply to all the attacks on the question. This will no doubt enlighten some authorities who are under a wrong impression that persons possessing qualifications other than L. I. Ms' should quit Local Boards service at present.

The rule No. 3 in the G. O. No. 231 applies also to L. I. M.'s who are now working under Local bodies and Rural dispensaries.

Order—No. 1093 P. H. dated 19th May 33. Rule 3 of the rules for the registration of practitioners of Indian Medicine approved in G. O. No. 231 P. H. dated 1st February 1933, lays down that except———capacity.

GOVERNMENT OF MADRAS (Local Self Govt. Dept.)

(PUBLIC HEALTH.)

G. O. No. 1093. P. H. 19th May, 1933 .

—o:—

Registration—Practitioners of Indian Medicine—Enforcement of Rule 3 of the rules issued with G. O. No. 231 P. H. dated 1st. February 1933—Extention of time granted for two years.—And exemption of servants of Local bodies—orders passed.

Order—No. 1093 P. H. Dated 19th May, 1933.

Rule 3 of the rules for the Registration of practitioners of Indian Medicine approved in G. O. No. 231 P. H. Dated 1st February 1933, lays down that except with the special sanction of the Govt. no one other than a practitioner of Indian Medicine registered under those rules shall be competent to hold any appointment as medical officer in any institution of Indian Medicine maintained or aided by the Government or a Local body or both.

It has been brought to the notice of the Government that the immediate enforcement of the provisions of this rule is likely to cause considerable hardship to the practitioners of Indian Medicine who are already in the employ of local bodies. The Government have consulted the principal, Indian Medical School, in the matter and proceed to pass the following orders :—

The Provisions of Rule 3 of the rules referred to above will not be enforced until after the expiry of a period of two years from 1st February 1933. All practitioners of Indian Medicine now employed in institutions of Indian Medicine maintained or aided by the Government or a local body or both should however take immediate steps to get their names registered under these rules.

The Government will be prepared to consider the question of exempting from registration such of the practitioners of Indian Medicine who were in the permanent employ of Local bodies on 1st February 1933 as have been refused registration by the central Board of Indian Medicine. The Government will not also object to their continuance in service if necessary, pending the Final orders of the Government on their applications for exemption, provided that such applications are submitted in time. If however exemption is not granted, the persons concerned should be discharged from service forthwith. 3. Chairmen of Municipal councils and presidents of Local Boards are warned against

(a) Confirming any practitioner of Indian Medicine, who not being in the permanent employ of Municipal councils and Local Boards on 1st February 1933 fails to secure registration under these rules; and (b) appointing and retaining such persons in service after 1st February 1935, whether in an officiating or temporary capacity.

(By order of the Government Ministry of Local Self Government.)

(Sd.) S. G. SENGODIAN,
Dy. Secry. to Govt.

L. F. A. Dispensary,
Kottapatam. }
Dated 12-7-33.

N. KESAVACHARM A. M. A. C.
Medical Officer.

Medical News & Notes

—:O:—

BREATHING FOR BEAUTY.

"I want to look nice," says the busy woman, "but I have neither the time nor the money to mess about with creams and lotions. What shall I do about it" ?

It is a common question, so here is a beauty recipe which costs nothing, takes comparatively little time and cannot possibly be described as messy. It brings colour to the cheeks, improves the figure, adds tone and richness to the voice, and is the favourite prescription of a certain hair doctor for thin and greying hair. It makes the eyes bright and according to the psychologists it steadies the mind. What is this be all, and cure all ? Deep breathing and correct breathing, in fact, breathing exercises.

Most of us are shallow breathers, and breathe only with the tops of our lungs. Not until we air ourselves thoroughly by doing deep breathing exercises before an open window each day, can we hope to receive a full allowance of the health and beauty which is our right. Five minutes in the morning, and five minutes at night should be aimed at.

Actresses are taught to overcome stage fright by being made to do deep breathing exercises before going on the stage, while for gaining fluency and strength to tell the bawarchi exactly what you think of him, the taking of a few deep breaths is unequalled. Deep and conscious breathing when walking is of great benefit, particularly if attention is paid to keeping the muscles of the stomach flat, and allowing each breath to push forward the diaphragm. It is a good plan to get a gymnasium instructor to show you a few breathing exercises, and to demonstrate the correct method of breathing : but if this is impossible the two exercises given are easy to do, and extraordinarily beneficial

Stand before an open window with the hands upon the hips, close the mouth, and take a deep breath into the ribs. Hold it for a moment and expire slowly. This should be done ten times night and morning.

The second exercise is particularly good for improving a flat figure. Place the palms of your hands upon a door, and take a deep breath. While slowly letting it out, let the body drop forward until the forearms are resting upon the door. Rest and repeat five times.

AN AFRICAN BEAUTY CABINET.

What does Keesling say: "East is East and West is West and never the twain shall meet!" But he also says that "Judy O'Grady and the Colonel's lady are much the same under their skins," and in one respect at least, East and West have something in common, as Mr. Andrew Dryburgh, M. P. S., has discovered.

During a recent visit to the Gold Coast Colony, he says, I came across various interesting matters, including what I have called an African Beauty Cabinet, used by the native African women. It consists of a plain wooden box, about 11 in. by 6½ in. by 3½ in., painted black, and bearing the mark of a cross on the lid. Inside, the box is divided into three compartments. These contain the articles used for morning toilet, afternoon toilet, and evening toilet. In the first compartment are the creeping roots of a species of cyperus or sedge, probably *Cyperus odoratus* or *Cyperus pertenuis*. The latter is the plant known as nagur mootha, which, when dried and powdered, is used by native women for securing and perfuming their hair. There is also a very light brown vegetable matter, like a bark which has been roughly broken up and which is inflammable. There are portions of a fibrous bark, in appearance resembling mezereon and of a simple astringent character; a section of a seed, somewhat resembling a palm seed, used for rubbing; and also a large whitish mass, fungus, probably a species of agaricus. The native woman takes a flat piece of stone and rubs to powder sufficient of the various ingredients along with water to form a paste, which is applied to the face, allowed to remain for an hour or two, and then washed off.

The procedure with the afternoon toilet is similar, three substances being used—an earthy material with numerous rootlets and containing some iron; steatite or soapstone and a colouring agent composed of the red arillus of the ravenala seeds, a plant belonging to the natural order Musaceae. Soapstone consists of a silicate of magnesium with a little iron and is a massive variety of talc with a soft and unctuous feeling like soap. It is used by the Arabs in their baths instead of soap to soften the skin. (Toilet rouge is made by colouring soapstone with safflower.) The evening toilet consists of the application of a mud pack made from the bluish aluminium clay of the Dansu river. The third compartment also contains a roughly fashioned wooden hair comb. The hair of the African native is short and very curly and a strong comb is required. This beauty box shows that African women are as careful to preserve their beauty as are their British sisters and that they devote probably as much, if not more, time to this toilet routine.

—(Indian and Eastern Druggist.)

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[No. 4.]

Medicine, Past, Present & Future or Ayurvedic Giants of Yesterday, Allopathic Generals of To-day, and Heirs Presumptive of Medicine To-Morrow

BY

DR. M. R. SAMEY, Ph. D., M. D., D. P. H. etc.
Consulting Physician, Bangalore.

Seership is an alluring attempt indulged in by great men at times of elation in power and pelf and Major General Sir John Megaw, K. C. I. E., Director General, Indian Medical Service, did a bit of pleasant prognostication by prophesying that it is the modern medicine that will survive, insinuating thereby that the Ancient System of Hindu Medicine was already in doldrums and that it should be effectively mollycoddled by a cavalier indifference on the part of his Allopathic "Jath Bhais", The Himalayan Heights of Simla was chosen as the appropriate "Bugle Rock" for sounding the sonota of success to an admiring audience at the Simla Medical Association and the Heir Apparents of the Indian kingdom of Healing were in the transports of joy in their phantasmagorean throne of Therapeutic triumphs conjured up by their "Mighty Magician of Modern Medicine". "To call scientific medicine as Allopathy was absurd" he said and chafed at this precious appellation given by the founder of Homeopathy and Samuel Hahnemann was exonerated of his absurdity by the presumptive evidence that it was

quite justified in his time, when opium was given straight away in cases of Diarrhœa. Those were days of Dr. Dopem and in this era of Dr. Dupem, a better name ought to be coined.

Modern Medicine was based on facts he said, as if ancient systems were based on fictions and fables and in the same breath he says, "If the giants of the Hindu System of Medicine were living to-day, they would have followed the modern system, for they were seekers after truth." What giants can be produced in Hindu system based on fiction and fable? "Dead men tell no tales, and never speak ill of the dead" has been the slogan of the worthy General, who, by a subtle process of inuendo, naively provokes his audience to quote "Pygmies" to the present Votaries of Ayurveda by suggestivity, by proclivity and delight. The present Ayurvedists are pigmies because they do not follow modern medicine, the sole monopolist of "Truth in Medicine".

I have somewhere read of a certain mathematician who on reading "Paradise Lost" made this profound criticism "that it was a very pretty piece of work, but he did not see that it proved anything". And so the singing of a bird cannot prove anything scientifically; and your best way of getting scientific knowledge about the little creature is by dissecting him, so as to find out where the music comes from and how it is made. Giants are not made of jejune substance and Ayurveda must be brimming with solid facts to rear these giants. If those giants of Ayurveda were living to-day they would have tolled the knell of that colossal system of self-deception, in obedience to which mines have been emptied of their cankering minerals, the entrails of animals taken for their impurities, the poison bags of reptiles drained of their venom, and all the inconceivable absurdities thus obtained thrust down the throats or injected into the blood of human beings, suffering from some want of organisation, nourishment or vital stimulation, to quote liberally

from Dr. Oliver Wendell Holmes' "Border Lines of knowledge". This disgrace of medicine has been well delineated by the great Dr. O. W. Holmes and the giants of Ayurveda would never join the shame with approbation. Giants beget giants and pigmies beget pigmies. How can pigmies spring from the loins of Giants or Giants from the loins of Pigmies? There is *Atavistic* theory to help us. Pigmies produce giants and giants produce pigmies according to the freaks of the Laws of Heredity.

So the race of Ayurvedic Giants of yore were emasculated by cavalier indifference of the Rulers to a puny race of pigmies that India abounds to-day and modern giants of medicine are exhorted to go ahead and improve and pompously proclaim to an astonished world that it is the modern medicine that will survive. In this, as in some other matters, "to stand as if a man were author of himself and knew no other kin is not exactly the thing". The best that any of us can do is to add somewhat, perhaps a very, very little to the building that others have worked and helped to rear; and if we are to begin by a clean sweeping away of what others have done, so that our puny architecture may have a better chance of being seen, is it not possible that the sum of our own doings, as time shall foot it up, will prove a minus quantity?

Possibly plain sensible people, who prefer small perspicuities to big obscurities, soft voiced solidities to high sounding nihilities, may take it into their heads *that wisdom was not born with the present generation and will not die with it* and so the giants of Hindu medicine had wisdom in their heads, full and replete, and were not gaping like open-mouthed fools for the windbags of modern medicine. They had good and sound knowledge to tower up as giants of Healing in their own time and for all time to come and the geneological tree of these giants has giants as their offsprings, though it

has been the systematic attempt of their rivals to dwarf them by their apathy and indifference. As Bacon says :— “Surely, like as many substances in Nature which are solid do putrify and corrupt into worms, so it is the property of good and sound knowledge to putrify and dissolve into a number of subtle, idle, unwholesome, and (as I may term them) vermiculate questions, which have indeed a kind of quickness and life of spirit, but no soundness of matter or goodness of quality”.

To rekindle the quickness and life of spirit, the attitude of indifference to the Indian Systems is not the way. If General Megaw and the Allopathic practitioners were really the seekers after truth (and not entirely of bread), which they profess to be, their attitude to the Indian Systems should not be one of aloofness, but of sympathetic attention to and active co-operation with the practitioners of other systems. Director General Megaw claims that his system was “Scientific Medicine”, suggesting thereby that other systems were not scientific. Really when reason is against a man, he will be against reason. Calling the giants of Hindu medicine for scientific alliance with him, he condemns Ayurveda as unscientific. Superstition is the disease of nations, says Robert Hall, and Englishmen have an over-dose of it in the belief that their System alone is scientific.

This disease of nations, “Superstition”, has grown inveterate by time. Robert Hall says that Enthusiasm is the disease of individuals and General Megaw is evidently a victim to this megawmania of believing that his system alone, of all others in the world, is scientific. Let us hope that Robert Hall’s prescription, *time*, will cure it.

It was Seeley who said that The idea of God has been degraded by childish and little-minded teaching and it is more general in Healing than in Preach-

ing Divinity. Co-operation must be substituted for competition amongst the contending parties in Healing and then alone can Medicine deserve the dignified appellation of "Science". The medical teachers must substitute what Dr. B. William Carpenter terms "unconscious cerebration" which is indeed the irrepealable law of all true mental growth and all right intellectual health in the place of conscious class-hatred and motivated apathy.

The best results of the best thinking in the best and ripest heads come under the operation of "unconscious cerebration for seeking *truth* from any quarter without passion or prejudice". Love is not love when it is mingled with regards that stand aloof from the entire point and Ayurveda must be regarded from the entire point of cure and not from the partial point of its giants who are as dead as the Dodo and as stale as meat with an imaginary love for their potential alliance. This august expression of sympathy from Scientific Savants for the gullible giants of by-gone years makes their dry bones instinct with life and turn in their graves to wonder if their seeds have turned into sardines. An Ethiop cannot change his skin, or a leopard his spots, skin deep again, and the Ayurvedins cannot be a race of Giants and Pygmies in one, unless hybridized by alien mongrels.

We know full well and right well that the best fruits of the best mental planting have and must have a pretty long interval between the seed-time and the harvest and Aryan Culture has its own *harvest-seasons* governed by the political and sociological atmosphere surrounding it. The adverse atmosphere enveloping Indian Culture on account of its political serfdom has been responsible for the waning of its towering intellectuality on the surface for a time and surely it will wax strong in its peerless luxuriance and magnificence when sympathies for Indigenous Culture rules the

land. The false pretext of patriotism, which the gallant General makes "out of Bounds", for medicine has really been the prop and pillar of modern medicine and 'British Medicine' has been made what it is by the British Medical Council and British Medical Association whose very plinth and foundation is the false pretext of "Patriotism".

What is good for the gander is good for the goose. The tender plant of Ayurveda must certainly be well pampered by patriotism, spurious or serious. What is "Buy-British"? Is it not patriotism run mad? Patriotism is no crime in any other land but India. It is a virtue, quite sedulously cultivated in every country. "Pro Patria" is the noblest term in any language or lexicon. Why should Ayurveda alone and Aryan Medicine, of all, be denied the fostering care and tender devotion of that noble sentiment "Patriotism". With the passionate confidence of interested falsehood, the Gallant General says that the false pretext of patriotism should not enter medicine. Then why is the British Medical Council and British Medical Association seething with that false pretext? Why does the British Council of Medical Registration accept the Medical Degrees of Japan and debar German, French and American Degrees (India of course)? Is it not under the false pretext of patriotism? Public Health, Medical Relief, Health Sanitation and State Medicine are the creature of High Policy of State and are governed entirely by the false pretext of patriotism. Sanitation and Education are the watchwords of modern Civilization and the great British Nation has been the first to realize the truth thereof and assiduously look to it that its canons of Education and Sanitation are well established before its Empire. Every Law and Code and every Enactment on the Statute Book is redolent with the spirit of the "false pretext of patriotism" and the entire British Medical Code and Ethics is a seething

tome of the false pretext of patriotism. Even the liberty of the individual which the Britisher loves so passionately is restrained to guard what each desires to gain, *viz.* preferential treatment to British Medicals in the Empire.

As Pope has admirably put it,

"His safety must his liberty restrain;
All join to guard what each desires to gain".

The safety of the British Doctor abroad is the very breath of British Medical Council's nostrils and it is secured in all and sundry ways under the false pretext of patriotism and yet Patriotism is discoursed down as a taboo in Medicine.

Trembling like a guilty thief surprised, this sermon on the Mount is doled out for being swallowed wholesale that Patriotism is Peccancy in India, because Ayurveda is being fostered with patriotic fervour by the sons of the soil. Show with might and main that Modern medicine alone will survive and there is a divinity that shapes the end of Ayurveda which has writ large on the broad plateau Boards of India that it is Ayurveda that survives in the country to eternity.

The moving finger writes and having writ *moves* on ; nor all your piety, nor wit shall lure it back to cancel half a line. Nor all your tears wash out a word of it.

WHEN YOU SLEEP.

Men are generally more restless sleepers than women. The average sleeper awakes about 35 times a night. He rarely remembers it in the morning unless he has wakened completely.

Deep sleepers move in their sleep about once in every 25 minutes. Average sleepers move once in 15 minutes and light sleepers once every 8 minutes.

Blue produces a desire to sleep. Painters using blue sometimes fall asleep. Noise disturbs sleep because it raises the blood pressure even when it does not wake the sleeper.

Original Articles

KING BHOJA (977 A. D. or 1030 A. D.)

BY

DR. GIRINDRA NATH MUKHERJEE, B.A., M.D., F.A.S.B.

VISHAGACHARYA.

Calcutta.

Nothing is known for certainty as to the identity of Bhoja as a physician. He is sometimes styled as Bhoja Raja or King Bhoja of Dhar. "After the accession of Raja Bhoja, however, Dhar assumed the first place ; during the rule of Munja Vakpati (974—95), Sindhuraja (995—1010), and Bhoja (1010—53). Dhar was recognized throughout India as a seat of learning, these monarchs, themselves literary composers and no mean scholars, being great patrons of literature who drew all the talent of India to their Courts". *Imperial Gazetteer of India*. Vol XI. new ed. Pp. 293—295. He was a patron of literature and was himself a reputed author. There is a Sanskrit Sloka in which a mendicant accuses God for not sparing the lives of such benefactors as Bhoja, Salibahana, Vikrama and Munja instead of blessing such useless men as Markandeya, Dhruva and Lomasa with long life :

धातभ्रातरशेषयाचकजने वैरायसे सर्व्वथा ।

यस्माद्विक्रमशालिवाहनमहीश्वरमुज्जभोजादयः ॥

अत्यन्तचिरजोविनो न विद्धितास्ते विश्वजीवातरो ।

मार्कण्डध्रुवल्लोमप्रभृतयः सृष्टाहि दीर्घायुषः ॥

He is said to have recovered the Thirty-two Thrones (वत्तिश सिंहासन) of the famous King Vikramaditya. "A famous library was owned by king Bhoja of Dhar in the eleventh century" (Macdonell). Damodara Misra is said to have composed his *Hanuman-Nataka*, when he lived at the court of this king.

In Sanscrit literature there is a biographical work known as *Bhojapravandha* or *Anecdotes of King Bhoja*. The author of it is Pandita Ballala. The book abounds in topics which are presented as materials of history, but the incidents recorded therein cannot

be accepted always as true. There is a reference to the use of anaesthetic drugs before operation. In my book *The Surgical Instruments of the Hindus*, Vol. I., p. 60 I alluded to it,—‘As early as 927 A. D. they (the Hindus) also knew drugs which they employed for the same purpose (anaesthesia) for Pandita Ballala alludes to a cranial operation, in his *Bhoja Pravandha*, performed on King Bhoja after he was rendered insensible by some drug called *Sammohini* (producer of unconsciousness). Another drug is also mentioned, *Sanjivani* (restorer of consciousness to life), by which he soon regained consciousness after the operation was finished.’

ततस्तावपि राजानं मोहचूर्णेन मोहयित्वा शिरःकपालमादाय
तत्करोठिकापुटे स्थितं शफरकुलं गृह्णित्वा कस्मिंश्चिद्वाजने निक्षिप्य
सन्धानकरणया कपालं यथवदारचय्य सञ्जीवन्या च तं जीवयित्वा तस्मै
तद्दर्शयताम् ।

Bhojaprabandha (Jivanadas Ed.) P. 98.

In the *Dasakumaracarita* mention is made of a chemical powder, the inhalation of which would bring on deep sleep or slumber (योगचूर्णम्—दशकुमारचरितम्) and a powder, which like anaesthetic drugs or curnas, paralyzes sensory or motor organs.

स्तम्भनचूर्णमिति इन्द्रियाणां,—वासवदत्ता ।

वोधेन्द्रिय कर्मेन्द्रियाणां,—दर्पण ।

Dr. Seal adds in the foot-note 1.—“The last interpretation is doubtful, but in any case the familiar use of a technical term of alchemy like stanmbhana curna (fixation powder) shows that already in the sixth century this branch of knowledge was widely cultivated.”

Positive Sciences of the Hindus, p. 65.

In the medical treatises and their commentaries mention is made of a Bhoja who seems to be a fellow-student of Susruta. He was a disciple of Kasiraja. Dallanacarya in his *Nivandasamgraha* while commenting on प्रभृतयः in

अथ खलु भगवन्तममरवर ऋषिगणपरिवृतमाश्रमस्थं काशिराजं
दिवोदासं धन्वन्तरिमौषधेनव-वैतरणीरभ्र-पौष्कलावत-करवीर्य-गोपुर-
रक्षित-सुश्रुतप्रभृतय उचुः ।

Susruta Samhita, I. i.

and thus refers to a Bhoja

औपधेनवादयः सुश्रुतान्तं सप्तशिष्यः उचुः उक्तवन्तः । प्रभृति शब्देन भोजादयः । अन्ये तु गोपुररक्षितौ नामद्वयं मन्यते । इतीप-
धेनवादयोऽष्टौ । प्रभृति ग्रहणात् निमि-काङ्गायन-गार्ग्य-गालव्य इति ।
एवमेते द्वादशशिष्याः प्राहुः स्म ।

Nivandha Samgraha, I. i.

This Bhoja is often referred to by later authorities as Bhoja Muni or Vrddha Bhoja to distinguish him from King Bhoja of Dhar. Dhar was the capital of Malava over which Bhoja reigned.

The neumerous quotations from *Bhojasamhita* in the commen-
taries prove the voluminous nature of the original treatise. From
the quotations, it seems to have been a text-book of the surgical
school. It is difficult to decide as to the real author of the book.
To both Vrddha Bhoja and King Bhoja of Dhar, the authorship of
the book may be ascribed.

The following books are ascribed to Bhoja :—

I. *Bhojasamhita* or *Bhojatantra*.—Bhoja is often quoted by
Dallana, Gayadasa and Cakrapani Datta, in *Bhanumati* (21 times).
He seems to have written a text book on medicine, for Dallana
describes it once as *Bhojasamhita* :

इति भोजसंहितोक्तं केचित् पाठं पठन्ति, स च प्रमादपाठः
निवन्धेष्वदर्शनात् ।

Nivandha Samgraha, P. 265.

and Gayadasa once as a tantra (fol. 52 as 1. 8.)

II. *Carucarya*.—By Bhoja Raja.

Beginning :

सुनौतिशास्त्रसद्वैद्य धर्मशास्त्रानुसारतः ।

विरच्यते चारुचर्या भोजराजेन धीमता ॥

End :

निरुक्तवल्कलं फल नारिकेलं

जले विनिक्षिप्य मूर्द्धन्मात्रम् ।

पचेद्गृहीत्वा हिमवालुकेन

निक्षिप्य यामद्वयमात्रमेव ॥

Mss.—*Report of Sanskrit and Tamil Mss.* 1893-94. Madras,
M. Seshagiri Sastri's Report No. 2. described under No. 51. Pp. 102,
103, 260, 261.

D. C. S., Vol.—xxiii. 13265, 13267-13269.

III. *Asvayurveda*.—

IV. *Rajmartanda*.—Commentry on *Yogasutra*.

V. *Yuktikalpataru*.—

VI. *Kamadhenu*.—

VII. *Rajmartanda*.—work on Smriti.

VIII. *Sarasvati Kanthabharana*.—work on Rhetoric.

Colophon—

इति महाराजाधिराज श्रीभोजदेवविरचिते सरस्वतीकण्ठाभरणालङ्कारे
रसविरचनो नाम पञ्चमः परिच्छेद समाप्तः ।

IX. *Tatvaprasasa*.—

X. *Ramayanachama*.—An epitome of Ramayana composed in the eleventh century.

XI. *Vyakarana*.—On Grammar. It is quoted in *Siddhanta-muktavali*.

“अत्र भोजः दलिवलिभूवलिरणि ध्वनि त्रिपञ्चपयश्चेति पपाठ ।

XII. He is also quoted in the Vedic *Nighantubhasya*.

Quotations from Bhoja in *Nivanda Samgraha* :—

1. ब्रीहिमुखं तत्र भोजः

शास्त्रं ब्रीहिमुखं कार्यमङ्गलानि षडायतम् ।

द्वाङ्गलं तस्य वृत्तं स्यात् तत्फलं चतुरङ्गलम् ॥

तन्मुखं ब्रीहिविस्तारं तनुसंगूढकण्ठकम् ॥ P. 78.

2. वेतसपत्रम् अत्र भोजः—

तीक्ष्णं अङ्गुलविस्तारं चतुरङ्गलमायातम् ।

अङ्गुलानि तु चत्वारि वृत्तं कार्यं विजानता ॥ P. 78

3. तत्र शङ्खनाभिः प्रधानत्वादेव क्षारः स्यात् एवञ्च विश्वामित्र-

भोजोक्तभागकल्पना निरस्ता । P. 101

4. तथा भोजेऽपि

ब्रणोदरास्थापनपौडितानां प्रमेहिणां कर्द्यतीसारिणां च ।

द्रवं न दद्यादथवापि कोष्णं स्वल्पं हितं भेषजसंस्कृतं च ॥

P. 198.

5. एतेनेतदुक्तं भवति पराचीनानामपि शल्यानामनुलोममाहरणीया-
नामपि प्रतिलोममेवाहरणं कर्त्तव्यम्, अनुलोमहरणे कक्ष्यादिषु
महानक्षेदानुवन्धो भवेत्, पर्शुकान्तरपतितानि चेत्यस्याग्रे,

अनुत्तुण्डितशल्यानि क्केदनीयमुखानि च । अनिर्घात्यानि जानीयाद्
भूयश्छेदानुबन्धतः । इति भोजसंहितोक्तं केचित् पाठः ; पठन्ति,
स च प्रमादपाठः निबन्धेष्वदर्शनात् । P. 265

6. सकोलकठिनः हस्तयोरपीति भोजः । P. 641

7. तथाच भोजः—

अत्यन्तसुकुमारा या रजो दुष्टं स्रवत्यपि ।

आव्ययामरता यस्मात् तस्मान्न खलति स्त्रियां ॥ Ibid.

8. तथा भोजोऽपि

अयुग्मे स्त्री पुमान् युग्मे सन्यायान्तु नपुंसकम् ।

शुक्राधिकत्वात् पुरुषः प्रमदा-रजसोऽधिकात् ।

शुक्रशोणितयोः सास्यात्तृतीया प्रकृतिर्भवेत् ॥ P. 702

9. गयीतु भोजदर्शनात् पिण्डादीनामन्यथाकारं पठति यथा—

चतुरस्रा भवेत् पेशीवृत्तः पिण्डो घनः स्मृतः ।

शाल्मलीसुकुलाकारमव्वदं परिचक्ष्यते ॥ P. 704

10. तथाच भोजः संघाताः सञ्चिता यैस्तु सीमन्तांस्तान् प्रचक्ष्महे
इति । P. 736

11. तदुक्तं भोजेन

हस्तपदाङ्गलितले कूर्चेषु सनिबन्धयोः ।

बाहुजङ्घाद्वये चापि जानीयान्नलङ्कानि तु ।

नामविशेषकथनं रचनाविशेषज्ञापनार्थम् ॥ P. 738

12. तथाच भोजवाक्यं—

पञ्चपेशीगतान्येव स्त्रीवर्जं विद्धि भूमिप !

अतश्च तिस्रो लीयन्ते स्त्रीणां शेषसि मुष्कयोः । इति ।

P. 743

13. तथाच भोजः । तस्मिन् मतिमता नित्यमात्मानं परिरक्षता
पित्तान्ते वमनं स्थाप्यं कफान्तञ्च विरेचनमिति । P. 1187

14. तथाच भोजः—

प्रमाणं स्त्रैर्हिके धूमे कृशो मात्रां पिवेन्नरः ।

सवलसु पिवेत्तावत् यावदशुर्नगच्छति ॥ P. 1196

15. तथाच भोजः—

एकाहं वा द्व्यहं वापि वस्तिं दद्यात् विचक्षणः ।

सप्ताहात् परतो देयं विश्रान्तस्य पुनः पुनः ॥

क्षीरं विंशतिरात्रञ्च अहोरात्रं साम्यतां व्रजेत् ।

तत्संशयगुणादष्टात् साम्यत्वात् दोषकृन्न च ।

तस्यान्नस्यप्रयोगस्तु स्त्रैहिकोविहितः स्यादिति ॥ P. 1197

Quotations from Bhoja in *Vyakhyamadhuksa* :—

1. भोजोऽपुत्रः—

रोमान्तेभ्यो यवार्द्धञ्च गुदौष्ठं परिचक्षते ।

गुदौष्ठादङ्गुलीच्चैव प्रथमं तां वलीं विदुरिति ।

सार्द्धाङ्गुलिमाना द्वितीया तृतीया चेति ॥ P. 57

2. यदाहः भोजः—

स्तब्धाङ्गुष्टिर्भवति गूढोत्श्वास स्तथैव च ।

दर्शनादसृजस्तज्जादगन्धाच्चैव प्रमुह्यति ॥ P. 120

3. यदाह भोजः—

मैरेयं मदिरा सोधू चतुर्थं नधु चोच्यते ।

एकैकं षड्रसन्तत्र रसश्चान्त्रमिष्यते ॥ P. 124

4. इह दशपिड्कासु विनतायाः पाठो भोजविरुद्धः । सुश्रुते भोजे हि नवपिड्काः तद्यथा :—

शराविका सर्षपिका कूर्मिका जालिनी तथा ।

कुलत्थिकालजो पुत्री विदारो विद्रधो तथा ।

नवैता पिड्का ज्ञेया इत्यादि ।

कुलत्थिका भोजे मसूरिका ज्ञेया ; किन्तु भोज एव

न्यूनतेति वक्तुं सुकरं सुश्रुते सर्वत्र चरके च विनताया

दर्शनात् । P. 203

5. अत्र भोजः—

अन्नं द्विगुणमादाय जन्तोर्नयति वङ्गणं ।

वङ्गणातद्गुजायुक्तं फलकोषं प्रपद्यत ॥ P. 221

6. भोजोऽपुत्रः—

महान्तं शीथमल्पस्त्रा हनूमन्यागलाश्रयं ।

लम्बस्थं मुष्करदृष्टा गलगण्डं विनिर्दिशेदिति ॥ P. 222

7. यदुक्तं भोजेन—

पञ्चैतानरुजो ग्रथीन् मर्मजानचलांस्त्यजेत् ।

कपोलगलमन्यासु दुश्चिकित्स्याश्च सन्धिष्विति ॥ P. 226.

8. तथाच भोजः—

अर्धदेत्वर्ध्दं जातं हृन्दजञ्चानुजञ्च यत् ।

द्विरर्ध्दमिति ज्ञेयं तच्चासाध्यं विनिर्द्दिशेत् ॥ P. 228

9. भोजेऽप्युक्तं न पचते स्थिरत्वाच्च प्रथितत्वात् स्वभावत इति ।

P. 229

10. भोजेऽप्युक्तं—

भगं परिसमन्ताच्च गुदं वस्तिं तथैव च ।

भगवद्धारयेद्यस्मात् तस्मात् ज्ञेयो भगन्दरः ॥ P. 255

11. तथाच भोजः—

निदानं परिपूर्णनां शम्बुक्वावर्त्तका यथा ।

समुत्तिष्ठन्ति वेगेन तोयवेगसमोरिता ॥ P. 256

12. तथाच भोजः—

दोषाः प्रदूष्यत्वत्मांसं पाणिपादसमाश्रिताः ।

पिङ्गकां जनयन्त्याशुदाहकण्डूसमन्वितां ।

दाह्यते त्वक् स्वरा रुक्षा पाण्डोर्ज्ञेया विचर्शिका ।

पादे विपादिका ज्ञेया स्थानान्यत्वाद्दिपादिकेति गदाधरः ॥

P. 268

13. भोजेऽप्युक्तं—

प्रदुष्टाश्च प्रच्युता दोषा रसत्वङ्मांससंश्रिताः ।

कुष्ठानि जनयन्त्याशु शरीरेषु शरीरिणाम् ॥ इति P. 270

14. तथाच भोजः—

श्वितन्तु द्विविधं विद्यात् दोषजं व्रणजन्तथा ।

तत्र मिथ्योशचाराद्भि व्रणस्य व्रणजं स्मृतम् ।

दोषजञ्च द्विधा प्रोक्तमात्मजं परजं तथा ।

परसंस्कारसंस्पर्शात् यत्तत् परजमुच्यते ।

तदात्मजं विजानीयात् यद्देहेष्णनिलादिजम् ॥ P. 272

15. तथाच भोजः—

शस्त्रप्रहारै स्तैस्तैस्तु व्याडदन्तनखैरपि ।
 क्षते व्यप्यथवा भग्ने बहुदोषस्य देहिनः ।
 रक्तं पित्तञ्च कुपितं व्रणमाशु प्रपद्यते ।
 कुरुतस्तौ समेतौ तु व्रणशोथं सुदारुणं ।
 आचितं तनु विस्फोटः कृष्णैः पिङ्कासन्निभैः ।
 पित्तवि सर्पबल्लिङ्गं तस्य शोषं विनिर्दिशेत् ॥ P. 282

16. यदाहभोजः—

यदा रक्तञ्च पित्तञ्च वातेनानुगतं त्वचि ।
 अग्निदग्धनिभान् स्फोटान् कुरुतः सर्वदेहगान् ।
 सज्वरान् सपरिदाहान् बिद्याद्विस्फोटकांस्तु तान् ॥ P. 284

17. भोजे तु मुषिकाकर्णमुष्ककोषफलाशय प्रभृतयोविकारः पठ्यते ।

P. 291.

18. अन्त्रालजी स्नायुगता भोजवचनावगन्तव्या । यदुक्तं

श्लेष्मानिली श्रितौ स्नायुं पिङ्कां परिमण्डलां
 दुष्टौ जनयतोऽवक्रामल्पपूरामकण्डूरां ।
 आमोडुस्वरसङ्काशां विद्यादन्त्रालजीन्तु ता ॥ P. 291

19. एषा भोजे “समन्तत” इति वचनात् कर्णस्य वहिरपि भवतीति केचित् व्याचक्षते ।

यदुक्तं

कफवातप्रकुपितौ मांसमाश्रितौ कर्णयोः ।
 समन्ततः परिस्तब्धां कुरुतः पिङ्कां स्थिरां ।
 विषमदाहसंयुक्तां विद्यात् पनसिकान्तुता ॥

.....अस्याः वातकफजायां भोजे दाहपाठो विकृतिविषमसमवाय-
 दधिष्ठानभूतरक्तप्रभावाद्वावगन्तव्यः ॥ P. 293.

20. भोजेऽपि पठ्यते—

तमेव भिन्न दुर्गन्धं घृतमेदोनिभं शिराः ।
 स्रवन्ति स्त्रावमनिशं तदा स्याच्छर्करार्ब्धुदमिति ॥

भोजे तमेवेति ग्रन्थि । P. 296

21. तथाच भोजः—

हस्तयो पादयोश्चापि गम्भीरानुगतं खरं ।
 मांसं कीलं जनयतः कुपितौ कफमारुतौ ।
 सशल्यमिव तं देशं मन्यते तेन पीडितः ।
 शर्कराकदरं केचिन्मन्यते वातकण्टकं ॥ P. 297

22. तदाह भोजः—

दृष्टमुक्कषितं ह्येतत् पित्तेष्वा पचतीति यत् ।
 मूर्च्छितो रसवीर्याभ्याम् समानव्यानसंहित ॥ P. 298

23. अत्र भोज वचनात्—

रक्तपित्तान्वितो वायुस्त्वक् प्रदेशाश्रितो यदा ।
 जन्मयेन्मण्डलं कृष्णं श्यावं वा न्यच्छमादिशेत् ॥ P. 301

24. भोजेऽपुनरुक्तं—

मणैरधो मेद्वर्चसं व्यानस्तु परिवर्त्तयेत् ।
 सशूलतोददाहाद्यैर्विज्ञेयापरिवर्त्तिका ॥
 श्लेष्मिकी कठिना स्निग्धा कण्डुमत्यल्पवेदनेति ॥ P. 302

25. तथाच भोजः—

मर्द्दनादभिघाताद्वा कन्यायोनि प्रपीडनात् ।
 लक्ष्यते यदि मेद्वर्चसं चर्मभेदैर्विलक्षितं ।
 अपाटिकेति तां विद्यात् पृथग्दोषैः समन्वितां ।
 वाता सा परुषा रुक्षा शूलनिस्तोदकारिणी ।
 पित्तात् सदाह्वा रक्ताद्वा दाहलक्षणासमन्विता ।
 श्लेष्मिकी कठिना स्निग्धा कण्डुमत्यल्प रेचना ॥ Ibid.

26. तथाच भोजः—

मेद्वन्ते चर्मणि यदा मारुतः कुपितो भृशं ।
 हारं निरूणद्धि शनैः प्रकशश्च मूहुर्भवेत् ॥ Ibid.

27. भोजे पुनरिदं दुष्टस्तन्यपानादपि भवतीति पठितं । यदुक्तं—

दुष्टस्तन्यपानेन मलस्यक्षालनेन च ।
 कण्डुदाहरूजावह्निः पिङ्गकैश्च समाचिता ।
 अहिपूतना च सम्भवति यथादोषश्च दारुणेति ॥ P. 303

28. यदाह भोजः—

दन्तेषष्टावोष्ठयोश्च मूलेषु दश पञ्च च ।
नव तालुनि जिह्वायां पञ्चसप्तदशामयाः ।
कण्ठे त्रयः सर्व्वसरा एकषष्ठिश्चतुः परा ॥ P. 305

29. यदाह भोजः—

सदाहो दन्तमूलेषु शोथः पित्तकफानिलात् ।
जातः क्षपयति कफं क्षीणे तस्मिंस्तु शोणितं ।
विवद्धमनिशं दन्तान् ताल्वोष्ठमपि दारयेत् ।
महाशेशिरमित्येतत् सप्तरात्रान्नित्यसून् ॥ P. 308

30. तथाच भोजः—

उपर्य्योव भवेन्मध्ये यथा पद्मस्य कर्णिका ।
पार्श्वतश्चाङ्कुरैर्दौर्ध्वैर्नासा चाप्यवसोटति ।
श्लेष्मरक्तसमुत्थानं तत्तालुर्बुद्धसंज्ञितम् ॥ P. 313

31. किन्त्वयं भोजेऽपि वातादेव पठितः । यदुक्तं—

तालुशोषो भवेद्वाताद्वाधिर्यः क्षतसंयुतः । P. 314

32. भोजेऽप्युक्तं—

वातपित्तकफरक्तमेकशः सर्व्वशोऽपि वा ।
कण्ठं यदा निषेवन्त इत्यादि । P. 315

33. तदुक्तं भोजेन—

तालुः शुष्यति कण्ठश्च वातेनायाम्यते यदा ।
कर्णोऽत्यर्थं प्रदह्येत समाहात् स जहात्यसून् ।
उष्यते चूष्यते पित्तात् कूप्यते परिदह्यते ।
अङ्गारेणैव सा दह्यात् प्राणनाश चतुर्हिनात् ॥ Ibid.
कफादन्तर्वहिःशोथः श्वासः कण्ठश्च रूध्यते ।
यस्य सोऽसुन्यजेद्रोगी त्र्यहाद्रोहिणीपीडितः ।
लक्षणं पित्तरोहिण्या तुल्यं शोणित कम्पनः ।
सर्व्वो दोषकृता या च सर्व्वलिङ्गसमन्विता ।
असाध्यां तां विजानीयाद्रोहिणीं सन्निपातनां ।
एषा सद्यो मारयति तिस्र आद्यां क्रियां विना । Ibid.

34. भोजेऽप्ययमेकवृन्दज इति पठितः । यदाह—
 श्लेषरक्तसमुत्थानमेकवृन्दं विभावयेत् ।
 तुल्यस्थानाकृतिवृन्दो वृन्दजोरक्तपित्तज ॥ P. 318
35. भोजेऽप्युक्तं—
 शङ्खनेव गले विद्धा शतघ्नोवा न सिध्यत । P. 318
36. भोजेऽप्युक्तं—
 पित्तेन जातो वदने विकारः पार्श्वे विशेषात् सत्तु येन शेते ।
 स्नायु प्रतान प्रभवो विशेषाद्वाहप्रपाकप्रचुरो विदारो ॥ P. 320
37. यत्तु भोजेऽभिहितं—
 षाट्तीयात्ततो मासाद्गर्भः स्रवति शोणितं ।
 उर्ध्वं संघातभूतस्तु गर्भः पतति योषितां ॥ P. 381
38. भोजेऽप्येति गतयः पठ्यन्ते तथाहि—
 उर्ध्वं वाह शिरःपादैरुन्म्याहयोनिमुखन्तु यः ।
 प्रतिकूलोपमस्थित्या स कूलः इति संज्ञितः ।
 अधस्तात् पार्श्वतो वापि तथैवाकुञ्चितोऽपि वा ।
 यो निःसृत्य मुखं योनेः ज्ञेयः प्रतिखुरस्तु सा ।
 योनिद्वारां तिर्गच्छेदयश्चैकसशिरोभुजः ।
 तमाहुर्वीजकं नाम सूदृग्गर्भचिकित्सकाः ।
 योनिमावृत्य य स्तिष्ठेत् परिखो गोपूरं यथा ।
 तथान्तर्गमयान्तं विद्यात् परिघसंज्ञितम् ॥ P. 383

Quotations from Bhoja in *Vyakhyakusumavali* :—

V. K. V.

1. भोजेऽप्युक्तम्—
 संनिपातज्वरे सर्वं कूर्याच्छमकफापहम् ।
 पञ्चाच्छ्लेष्मन् संक्षिप्ते शमयेत्पित्तमारुतौ ॥ P. 39
2. See 4. Ni. S.—P. 69
3. वातपित्तकफावृद्धा मेदश्चापि समाचितम् ।
 जङ्घयाः कण्ठरां प्राप्य मत्स्याण्डसदृशान्वहुन् ॥
 कुर्वन्ति, इत्यादि । P. 332 & 333
4. कुर्वन्ति ग्रन्थीन्त्यन्तभ्यः पुनः प्रकुपितोऽनिलः ।
 दोषैस्तैर्ध्वगो वक्षःकक्षामन्यागलाश्रितः ॥

नानाप्रकारान् कुरुते ग्रन्थीन् सा त्वपचीमता ।
 व्यामिश्रदोषोत्पन्नां तु कच्छसाध्यं विनिर्दिशेत् ॥
 तासां वातोत्तरा कृष्णा वातिकीवेदनायुता ।
 क्षिप्रपाकसमुत्थाना दाहयुक्ता च पैत्तिकी ॥
 गूढविपाका कठिना कफात्स्निग्धा रुजाकरी ।
 मेदोधिका स्नेहिकी च विशेषात्सा समार्कवा ॥
 तां तु मालाकृतिं मन्याकण्ठहृदनुसंधिषु ।
 गलमालां विजानीयादपचीतुल्यलक्षणम् ॥ P. 334

5. तथा च भोजः—

तस्मान्मतिमता नित्यसात्मानं परिरक्षता ।
 पित्तान्तं वमनं स्याप्यं कफान्तं च विरेचनम् ॥ P. 585

6. See 14 N. S. P. 590

7. तथाच भोजः

प्रयोगिकं स्नेहिकं च द्विविधं नस्यमुच्यते ।
 प्रयोगिके विन्द्वोऽष्टौ स्नेहिके शुक्तिरिष्यते ॥
 दोषच्छ्रायं समासाद्य दद्याद्विद्विचतुर्गुणम् । P. 594

Quotations from Bhoja in *Tattvacandrika* :—

1. भोजेऽप्युक्तं

धान्यकं बालकं सुस्तं विल्वं पित्ते प्रयोजितम् (तु दीपनम्) ।
 आमशूलविवम्भघ्नं पाचनं बल्लिदोपनम् (नागरान्वितं) ॥

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2. उक्तं हि भोजे

वमनं च विरेके च तथा शोणित मोक्षणे ।
 सार्द्धत्रयोदशपलं प्रस्थमाहुर्मनोषिणः ॥ P. 183

3. आह भोजः

सम्यङ् निरुद्धं तैलाक्तं जलेनोष्णेन सेवितम् ।
 योजयेदल्पमात्रेण तत्क्षणं स्नेहवस्तिना ॥ P. 390

Quotations from Bhoja in *Bhavaaprakasa* :—

1. अन्तं द्विगुणमादाय वातो नयति वङ्गणम् ।
 वङ्गणात् तद्विजायुक्तं फलकोषं प्रपद्यत ॥ P. 776

2. पञ्चैतानरूजो ग्रन्थीन् मर्मजानचलांस्यजेत् ।
कपोलगलमन्यास दुश्चिकित्स्य हि सन्धिषु ॥ P. 785
3. असाध्यो मर्मजो ज्ञेयः पक्वोऽपक्वश्च विद्वधिः ।
सन्निपातोत्थितोऽप्येव पक्वएव हि वस्तिजः ।
त्वग्जा नाभेरधोजश्च साध्यो यश्च समीपजः ॥
अपक्वश्चैव पक्वश्च साध्यो नोपरिनामितः ।
आधानं वदन्निष्यन्दं कर्द्दिहिक्का तृषान्वितम् ।
रूजाश्वाससमायुक्तं विद्वधिं नाशयेन्नरम् ॥ P. 800
4. अथ भगन्दरस्य निरुक्तिमाह भोजः ।
See 10 V. M. K.
भगं परिसमन्ताच्च गुदं वस्तिं तथैव च ।
भगवद्धारयेदस्मात्तस्मादेव भगन्दरः ॥ P. 843
5. दाह्यते त्वक् खरा रुक्षा पाण्डोर्ज्ञेया विचर्च्चिका ।
पादे विपादिका ज्ञेया स्थानभेदाद्विचर्च्चिका ॥ P. 872
See 12 V. M. K.
6. यत आह भोजः
महाशैषिर इत्येष सप्तरान्निहन्यसूनिति । P. 1052

FEVER IN AYURVEDA

BY

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Calcutta.

(Continued from our last issue.)

Recipes of Guruchyadi Churna.

गुडुच्यति विषा शुण्ठी भूनिस्व यवतिक्तकम्
 मुस्ताकटा यवचारः काशौशं भस्मातिथिः
 एतेषां समभागिन रूमेव विनिर्दिशेत्
 यक्तुं प्रीहा पाण्डुरोगमग्निमान्द्यमरोचकम्
 ज्वरं अष्टविधं हन्ति साध्यासाध्यमथापिवा
 नाना देशोद्भूतैश्च रविदोष भवं तथा
 विरुद्धमेषजभवं ज्वरमाशु व्यपोहति ॥

R/

Guduchi (Tinospora Cordifolia)
 Ataich (Aconite Hetrophyllum)
 Chireyta (Kariyat)
 Kalmegh (Creat)
 Mustaka (Cyperus Rotundus)
 Pippali (Piper Longum)
 Yabakshar (Potassium Carbonate)
 Hirakash (Ferri Sulp)
 Champa bark (Michelia Champaca)

Take equal parts of the above, mix well together in a mortar and administer in doses of 1/4th tola in slow malarial fever with aggravation of humours, loss of appetite, anæmia and Jaundice.

Therapeutic action of the ingredients :—

Guduchi (Tinospora Cordifolia)—Antiperiodic, Antibilious, Anti Malarial and Stomachic.
 Ataich (Aconite Hetrophyllum)—Bitter, tonic, febrifuge and anti periodic.
 Chireyta (Kariyat)—Febrifuge, anti-bilious, valuable tonic during convalescence.
 Kalmegh (Creat)—Febrifuge, liver regulator, antipyretic and anthelmintic.

Mustaka (Cyperus Rotundus)—Diuretic, diaphoretic, astringent, febrifuge, emmenagogue, vermifuge, useful in chronic fever.

Pippali (Piper Longum)—Stimulant, Carminative, anti-catarrhal, vermifuge, alterative and emmenagogue.

Yabakshar (Carbonate of Soda)—Stomachic, diuretic, antacid, resolvent, useful in enlargement of liver, spleen and glands, painful urination etc.

Hirakash (Ferri Sulp.)—Diuretic, alterative, useful in anæmia, spleen, neuralgia, rheumatism, amenorrhœa etc.

Champa Bark (Michello Champah)

Recipes of Pleehari Rasa.

कषैकं तालचूर्णस्य तत्पादांशं सुवर्णकम्
पलाईं सततासच्च तत्समं गुडसमकम् ।
सृगजिनस्य भस्मापि कर्षमव प्रदापयेत्
लिम्पाकाङ्गित्वसप्तस्य सर्व्वमेकैव कारयेत् ।
रसगुञ्ज प्रमाणेन वटीं कारयेत् ततः
मधुना वक्त्रि चूर्णेन खादेन्नित्यं यथावलम् ।
असाध्यमपि प्रोद्दामं हृन्त्यवश्यं न शंशयः
यकृतं पाण्डुरोगञ्च गुल्मादिकभगन्दरान् ॥

R/

| | | | |
|------------------------------------|-----|-----|-----------------|
| Corrected Harital (Realgar) | ... | ... | 2 Tolas |
| Reduced Gold (Aurum) | ... | ... | $\frac{1}{2}$ " |
| „ Copper (Cuprum) | ... | ... | 4 " |
| „ Mica (Abhrakam) | ... | ... | 4 " |
| Stag's Skin Vasma (Sambhar Sringa) | ... | ... | 2 " |
| Root Bark of Lemon | ... | ... | 2 " |

Rub the above ingredients in a mortar to fine powder and prepare pills of 12 grains each. To be administered once a day with honey and Pulv. Chita Mool (Root of Plumbago Rosea). This medicine is prescribed with marvellous efficacy in incurable spleen, Liver, Jaundice, cellulities and fistula-in-anno.

Therapeutic action of the ingredients :—

Corrected Harital (Realgar)—Antiperiodic, alterative, tonic, useful in fever, asthma, cough, chronic fever, phthisis, paralysis, dropsy, rheumatism, irregular fever etc.

Reduced Gold (Aurum)—Nervine tonic, aphrodisiac, alterative, diaphoretic, diuretic, promotes flow of kidneys and stimulates activities of stomach and digestion.

„ Copper (Cuprum)—Anti-spasmodic, antiseptic and antipyretic.

„ Mica (Abhrakam)—Astringent, alterative, aphrodisiac, stimulates metabolic action of tissue cells; indicated in fever, enlarged spleen and liver, urinary diseases, chronic fevers, nervous debility, anæmia, jaundice, asthma, consumption, gonorrhœa and leucorrhœa etc.

Stag's skin Vasma—Anti-spasmodic, sedative, nervine tonic and is useful in rheumatic pains.

Root Bark of Lemon—Febrifuge and refrigerant.

Recipes of Pleehtantaka Rasa.

हतशुल्लश्च तारश्च गगनायसमुत्तिका ।

दरदं पुष्पकं मृतं गन्धकं नवमं तथा ।

गुग्गुलुस्त्रिकटुराश्च तथा जैपालबीजकम् ।

विफला कटुका दन्तौ देवदारौ तु सैन्धवम्

विहृत्ता तु यवचारो वातारितैलमर्दितम्

अष्टोदरानि पाण्डुलमानाहं विषमज्वरम्

अजीर्णमामं सकफं लघुश्च सर्व्वशूलकम्

कासं श्वासश्च शोथश्च सर्व्वमाशु व्यपोहति ।

प्रीहान्तको रसो माम् प्रीहोदरविनाशनः ॥

R/

Reduced Tamra (Copper)

„ Raupyam (Argentum)

„ Abhrakam (Mica)

„ Mouktika (Pearl)

Corrected Hingulam (Realgar)

„ Rasanjanam (Antimony)

„ Paradam (Hydrargyrum)

„ Gandhakam (Sulphur)

„ Gugulu (Balsam Oliendron Mukul)

Pulv. Sunt (Dry Ginger)

„ Pipul (Piper Longum)

„ Black Pepper (Piper Nigrum)

„ Rasna (Vanda Roxburghie)

Corrected Jaipal Beeja (Croton Tiglium)

Pulv. Haritaki (Terminalia Chebula)

„ Amlaki (Embellic Myrobalan)

„ Boyerah (Terminalia Belirica)

„ Katki (Black Hellebore)

„ Dantimool (Jatropha Montana)

„ Ghosamool (Luffa Acutangula)

Saindhab (Rock Salt)

Teuri (Turpeth)

Purified Yabakshar (Potassium Carbonate)

Aronda Oil (Castor Oil).

Rub the above ingredients taking in equal proportion in a mortar and prepare pills of 2 grains each. This is highly efficacious in enlargement of spleen and liver, Jaundice, dropsy, anaemia, and in abdominal colic. It is also useful in asthma as well as catarrhal complaints.

Therapeutic action of the ingredients :—

Reduced Tamra (Cuprum)—Anti-spasmodic, Antiseptic, sedative, alterative, emetic and purgative. It is useful in ague, remittent and relapsing fever, phthisis, skin diseases and liver troubles.

„ Raupyam (Argentum)—Tonic, constipative, cooling, appetiser of Vayu and Kapha, rejuvenator, astringent and improver of memory and intelligence.

„ Abhrakam (Mica)—Alterative, aphrodisiac, astringent, and stimulates metabolic action of tissue cells etc.

Reduced Mouktikam (Margaritta)—Highly stimulant, tonic, laxative, sedative, nutritive and antacid.

Corrected Hingula (Cinnabar)—Tonic, alterative, anti-septic, purgative and cholagogue. It stimulates digestion, salivation and nutrition.

Corrected Rasanjan (Antimony)—

„ Paradam (Hydrargyrum)—Action is like cinnabar

„ Gandhakam (Sulphur)—Antiseptic, disinfectant, paraciticide, vermifuge, promotes gastric juice, stimulates flow of biles and purifies blood.

Corrected Guggulu (*Balsamodendron Mukul*)—Dimulcent, anti-spasmodic, emmenagogue, carminative and aperient.

„ Sunt (*Zingibar Officinalis*)—Aromatic, stimulant, carminative, sialagogue, stomachic and laxative. It is useful in dyspepsia, flatulence, colic, chronic bronchial cough and dropsy.

Long Pepper (*Piper Longum*)—Stimulant, tonic, carminative, alterative, vermifuge, emmenagogue and aphrodisiac. It is useful in dry cough, hoarseness of voice, asthma, rheumatism, and in dyspepsia.

Black Pepper (*Piper Nigrum*)—Acrid, pungent, hot, carminative, anti-pyretic, anti-periodic. It is useful in dyspepsia and flatulence.

Rasna (*Vanda Roxburghie*)—Fragrant, bitter and febrifuge, useful in rheumatism and in diseases of the nervous system.

Corrected Jaipal-Beeja (*Croton Tiglicum*)—Drastic purgative, narcotic, vermifuge. It must be very carefully purified and corrected before use.

Haritaki (*Terminalia Chebula*)—Safe and effective purgative, stomachic, laxative, alterative, and tonic. It equaminates Pitta and eliminates bile and slesma (phlegm). It is useful in rheumatism, worms, flatulence, chronic diarrhoea, piles, hæmorrhage and is of invaluable service in combination with other drugs.

Amlaki (*Embellic Myrobalan*)—

Boyerah (*Terminalia Belirica*)—Astringent, tonic, expectorant, and laxative, useful in cough and catarrh.

Katki (Black Hellebore)—Vermifuge, febrifuge, and cardiac tonic like *Digitalis*. It should never be used in toxic doses.

Dantimool (*Jatropha Montana*)—Purgative, useful in anasarca, constipation and flatulence.

Ghosamool (*Luffa Acutangula*)—Diuretic, nutritive and laxative. It is useful in dropsy.

Saindhab (Rock salt)—Digestive, carminative and stomachic, In large doses it is cathartic and emetic.

Teuri (*Ipomea Turpethum*)—Cathartic (*Bhedaniya*), useful in dropsy.

Yabakshar (Carbonate of Soda)—Diuretic, stomachic, laxative, antacid and resolvent (helps absorption of inflammation).

Aronda Taila (Castor Oil)—Purgative.

Recipes of Mohamrityunjaya Lauha.

शुद्धसूतं समं गन्धं जारिताभं समं तथा
 गन्धस्य द्विगुणं लौहं मृतताम्रं चतुर्गुणम्
 हित्वा सैन्धवं विडं वराटौभस्य शङ्खकम्
 चित्तकं कुमटी तालं रामटं कटूका तथा
 रोहितं विवृता चिच्छा विशाला धवलाङ्गुठः
 अपामार्गकालरखमस्त्रिका च निशाद्वयम्
 प्रियङ्गुद्वयं पथ्या अजमोदा यमानिका
 तत्त्वकं शरपुष्पा च यक्ष्मर्द्वी रसाञ्जनम्
 प्रत्येकं शाणसानेन भावेद्येदाट्टकद्रवैः
 गुड्याः स्वरसेनापि मधुनः कुडवार्जकम्
 बटीकां कारयेद दैव्यो गुञ्जपटप्रमितां पुनः
 अनुपानं प्रदातव्यं बुद्धौ दोषानुसारतः
 भक्षयेत् प्रातरुत्थाय सर्वरोगकुलान्तकम्
 ग्रीहानं ज्वरसुगन्ध कामस्य विषमज्वरम्
 आमवातं यक्ष्मकुलं श्वासमर्शः शिरोरुजम्
 गुल्मशोथोदरानाहमप्रसांसं यक्ष्म चयम्
 सकामलं पान्दुरोगसुदरश्च सुदारुणम्
 रोगानौकविनाशाय केशरी करिणी तथा
 मृत्युञ्जयो महालौहः ग्रीहगुल्मविनाशनः
 प्राणिनान् हितार्थाय शम्भूना प्ररिकीर्तितः ॥

R/

| | | |
|---|-----|--------------------|
| Corrected Paradam (Hydrargryum) | ... | $\frac{1}{2}$ Tola |
| „ Gandhakam (Sulphur) | ... | $\frac{1}{2}$ „ |
| Reduced Abhrakam (Mica) | ... | $\frac{1}{2}$ „ |
| „ Lauham (Ferrum) | ... | 1 „ |
| „ Tamram (Copper) | ... | 2 „ |
| Corrected Yabakshar (Carbonate of Soda) | ... | $\frac{1}{2}$ „ |
| Sarjikshar (Soda Carbonas Impura) | ... | $\frac{1}{2}$ „ |
| Saindhab Labanam (Rock Salt) | ... | $\frac{1}{2}$ „ |
| Bit Labanam (Black Salt) | ... | $\frac{1}{2}$ „ |
| Cawrie Vasma (Cypraea Mowta) | ... | $\frac{1}{2}$ „ |
| Sankha Vasma (Calcium) | ... | $\frac{1}{2}$ „ |

| | | | |
|---|-----|---------------|-------|
| Chita Mool (Plumbago Zelandica) | ... | $\frac{1}{2}$ | Tola. |
| Corrected Monchal (Red orpiment) | ... | $\frac{1}{2}$ | " |
| " Harital (Trisulphurate of Arsenic) | ... | $\frac{1}{2}$ | " |
| " Hingul (Sulphurate of Mercury) | ... | $\frac{1}{2}$ | " |
| Pulv. Priangu (Aglacia Roxburghianna) | ... | $\frac{1}{2}$ | " |
| " Katki (Black Hellebore) | ... | $\frac{1}{2}$ | " |
| " Rohitak chhal | | | |
| " Teuri (Ipomœa Turpethus) | ... | $\frac{1}{2}$ | " |
| Tentul chhal Vasma (Ash of Tamarind Bark)... | | $\frac{1}{2}$ | " |
| Pulv : Rakhalsasa Mool (Root of Citnulus Colocynthis) | ... | $\frac{1}{2}$ | " |
| Pulv. Dhala-Akra Mool (White Anacyclus Pyrethrum) | ... | $\frac{1}{2}$ | " |
| Apamarga Vashma (Ash of Achyranthis Aspera) | ... | $\frac{1}{2}$ | " |
| Taljata Vashma (Ash of flowering stalk of Palm tree) | ... | $\frac{1}{2}$ | " |
| Amla Vetas (Rumex Crispus) | ... | $\frac{1}{2}$ | " |
| Pulv. Haridra (Turmeric) | ... | $\frac{1}{2}$ | " |
| " Daruharidra (Berberis Aristata) | ... | $\frac{1}{2}$ | " |
| " Yamani (Ptychotis Ajowan) | ... | $\frac{1}{2}$ | " |
| Purified Tutiya (Copper Sulphate) | ... | $\frac{1}{2}$ | " |
| Sarapunkha | ... | $\frac{1}{2}$ | " |
| Rohitak chhal | ... | $\frac{1}{2}$ | " |
| Rasanjana (Barberis) | ... | $\frac{1}{2}$ | " |

The above ingredients should be pulverised and mixed with 16 Tolas of Honey and rubbed to a mass to prepare pills of 12 grains each for medicinal use. It should be given in the morning on empty stomach with a suitable vehicle according to condition.

The technic that has been found effective in the treatment of Agantuka-azar is briefly described below for the information of the profession :—

1. Abhighata-azar (Fever caused by injury)—Treatment should be carried as is done in the derangement of Vata. Hot and irritating food or drink or external application should be avoided, carminative and refrigerant and astringent in combination with aromatics should be prescribed.

अभिघात ज्वरे युष्मात् क्रियासुख विवर्जिताम्

कषायं मधुरं क्षिप्तं यथादोषमथापिवा ।

2. Abhisapa-azar (Cursed fever)—Adequate atonement (Prayaschitta) should be recommended and suggestive treatment directed to improve the mental strength of the patient. *Vide* couplet below :—

अभिवाराभिशापोखौज्वरौ होमाद्दिना जयेत्
दानस्त्रस्तयनातिस्थौ हृत्पातग्रह पीडजौ ॥

3. Osadhi-azar (Fever caused by drugs)—antidote to the drug should be prescribed in combination of *Sarbagandha* viz. Karpura (Camphor), Kakla (Cocculus Indicus), Aguru (Fragrant Wood), Kunkuma (Saffron) and Lavanga (Cloves) as per injunction of the under mentioned Sanskrit couplet :—

ओषधि गन्धविषजौ विष पित्तयवाधानैः
जयेत् कषायैर्मतिमान् सर्वगन्धकृतैर्भिषक् ।

4. Krodha-azar (Fever caused by anger)—Anger of the patient should be propitiated with sweet and pleasant words and treatment advised for Pitta derangement should be followed, as Pitta system is aggravated in this type of fever.

क्रोधजे पित्तजित् कात्या-अर्थाः सहाकसेव च ।

5. Kama, Soka, and Vaya-azar should be treated with words of assurance and attempt should be made to win the confidence of the patient, as mental symptoms in these types of fevers predominate and the principal object should be to equilibrate the Vayu system which invariably gets out of order in these types of fevers as per injunction conveyed in the following couplet :—

आश्वासनेष्टलाभेन वायोः प्रशमनेन च
हर्षेणैव शमं यान्ति कामशोकभयज्वराः ।

Kama and Krodha-azars manifest themselves as soon as one of the two prevails over the other and when Kama and Krodha are simultaneously excited, Vaya-azar is eradicated and clever management of these fevers would suffice to effect a cure without oral administration of any medicine. *Vide* couplet below :—

कामात् क्रोधज्वरानाशं क्रोधात् कामादुद्वहः
याति ताभ्यामुभाभ्याच्च भयशोकसमुद्वहः ।

Evidently therefore Krodha-azar is controlled if Kama is excited as Krodha is the primary cause of Kama. In case Kama and Krodha could be made to appear at the same time, Vaya and Soka-azars would automatically disappear.

Bhuta-azar (Demonaical Fever)—Is well controlled by enchanting hymns and following the treatment of suggestion. Enchanted mustard are too frequently used for the purpose with greater success as per instruction given in the verse below :—

Symptoms of Visama—azar.

दोशोऽत्योऽद्वितसम्भुते ज्वरोत्सृष्टस्य वा पुनः
धातुमन्यतमं प्राप्य करोति विषमज्वरम् ।
(सन्ततं सततान्येद्युस्त्वतीवक चतुर्थकान्)
सन्ततं रसवक्तव्यः सोऽन्येद्युः पिशिताश्रितः
मेदोगतस्त्वतीयेऽङ्गि अस्थिमज्जागतः पुनः
कुप्याच्चतुर्थकं धोरमन्तकं रोगसङ्करम् ।
सप्ताहं वा दशाहं वा द्वादशाहमथापि वा
सन्तत्या श्वेदविस्मर्गो स्यात् सन्ततः संनिर्गद्यते ।
अहोरात्रे सततको द्वीकालावनुवर्तते ।
अन्येद्युष्कस्तुऽहोरात्रे एककालं प्रवर्तते
तृतीयकस्त्वतीयेऽङ्गि चतुर्थेऽङ्गि चतुर्थकः ।
केचिद्दामिषोऽन्यं ब्रूवति विषमज्वरम् ।
कफपित्तात् विकगाहो विविधः स्यात् तृतीयकः
चतुर्थको दर्शयति प्रभावं द्विविधं ज्वरं ।
लङ्घ्याभ्यां श्लेष्मिकः पूर्वं शिरसोऽनिलसम्भवः
विषमज्वर एवान्यश्चतुर्थकं विपर्ययः ।
मध्येऽह्नि ज्वरयत्यादावन्ते च मुञ्चति
नित्यं मन्दज्वरो रुचः शून्यकस्तेन सौदति
सङ्घातः श्लेष्मभूयिष्ठो नरोवातबलासको
प्रलिप्तन्निव गावानि घर्मेण गौरवेन च
मन्दज्वर विलिपी च संगीतः स्यात् प्रलिपकः ॥

SYMPTOMS—

When fever is not treated in its proper way outlined by *Sastra* and is suppressed by mal-treatment or by use of strong drugs, the exciting causes, *viz.* Vayu, Pitta and Kapha, are not fully restored to their normality—the stage of equilibrium. The Doshas (Exciting causes) having received stimulation from wrong or erroneous diet, drink or mode of living, these reappear, affecting Dhatus, when they are called Visama-azar which is subdivided into five heads : *viz* (1) Santata-azar (Remittent type), (2) Satata-azar (Double quotidian type), (3) Anyaduska, (4) Tritiyaka-azar (Tertian type) and (5) Chaturthaka (Quartan).

Diagnosis of different types of Visama-azar in relation to Dhatus (Diathesis) is made as shown below.

When doshas affect Rakta (Blood), it causes Satataka-azar.

In this type of fever, there is rise of temperature twice in 24 hours i. e. twice in day time, twice in night or once in day and again once in night.

When Doshas effect Rasa (Chyle), it is considered as Santata type of fever. This type of fever usually terminates on either 7th, 10th or 12th day from its onset.

When the Doshas are embedded in Mansa (Flesh), the type is diagnosed as Anyaduska. There is only one rise of temperature in 24 hours.

When Doshas are traced to Meda (Fat), the type is diagnosed as Tritiyaka. Temperature in this type of fever rises once in every alternate day.

When Doshas affect Majja (Marrow), it is called Chaturthaka (Quartan type of fever). Onset of fever in this type of fever is on every second day.

All the types of Visama-azar should be considered Sannipata type and the line of treatment should be directed to ameliorate the aggravated Doshas and bring them to their normal stage as enjoined in the following couplet.

विषमाय ज्वराः सर्वे सन्निपात समुद्भवाः ।

अथोस्त्रेनस्य दोषस्य तेषु कार्यं चिकित्सितम् ॥

Seat of pains in Visama-azar in accordance with derangement of Doshas is as under :—

In derangement of Pitta and Slesma—pain is felt on the back and on the spinal region.

In derangement of Vata and Slesma—pain appears on back.

In derangement of Vata and Pitta—the pain is felt in head only.

But in Chaturthaka type of fever when Vata is deranged, the pain appears in head first and then it spreads all over the body, while in Slesma derangement, the pain is prominent over the loins and then it spreads to the other parts of the body.

Besides above, there is another type of Visama-azar known as Prolepaka type where the skin is moist with perspiration, appearance is pale as if the body is painted with a peculiar paint, little chill at onset with slow rise of temperature daily in the

evening. These manifestations are generally marked in tuberculous patients.

In Satata-azar (Intermittent type) when attended with external chill, aversion to food, indigestion, aggravation of humours, ascites or glandular swelling, Brihat Vargadi decoction should be prescribed.

Recipes of Vargadi are as under :—

भार्गी पथ्वा कटुः कुष्ठं पपैटं सुस्तकं कणा
 अमृतं दशमूलञ्च नागरं काययेद भिषक्
 इति धातुगतं सर्वं वहिःस्थं शीतसंयुतम्
 सतदायं ज्वरं घोरं मन्दाग्निलमरोचकम्
 ग्रीहानं यकृतं गुल्मं श्वयथुश्च विनाशयेत् ॥

R/

Bamunhati

Haritaki (Terminalia Chebula)

Katki (Black Hellebore)

Kur (Costus Speciosus)

Khetpapa (Oldenlandia Corymbosa)

Mustaka (Cyperus Rotundus)

Pipul (Piper Longum)

Guduchi (Tinospora Cordifolia)

Dasamool (Compounds of (1) Gokshur, (2) Brihati, (3)

Kantikari, (4) Chakule, (5) Salpani, (6) Bael,

(7) Ganiari, (8) Sona, (9) Parul, (10) Gambhari.

Sunth (zingiber Officinalis)

Take equal parts of the above to a total weight of two tolas and boil these together in half a seer of water over a gentle fire to 2 oz. Then strain it through a linen for use, to be administered twice or thrice a day according to nature of the disease.

Sannipata.

चणे दाह चणे शीतमस्थिसन्धि शिरोरुजा ।

संसावे कलुषे रक्ते निर्भूयं चापि लोचने ।

स्वस्रगौ सहजौ कण्ठे कण्ठः शूलैरिवाहतः ।

तन्द्रा मोहः प्रलापश्च कासः श्वासोऽहृदिभ्रमः ।

परिदग्धा स्वरपक्षा जिह्वा स्रक्ताङ्गता परम् ।

धौवनं रक्तपित्तस्य कफेनीनिमित्तस्य च ।

शिरोसी लोठनं दृष्ट्वा निद्रानाशोऽहृदिभ्रमा ।

खेदमुत्र पुरीषानां चिराद्यर्शनमल्पशः ।

कृशत्वं नाति गात्राणां प्रवतं कण्ठकुजनम् ।
 कीडानं श्ववरक्तानां मलानाञ्च दर्शनम् ।
 मुक्तत्वं स्रोतसां पाको गुरुत्वमुदरस्य च ।
 चिरात् पाकश्च दोषाणां सन्निपातज्वराकृति ॥

Symptoms of Sannipata type of fever :—

1. Heat and chill in alteration.
2. Aching pain in joints of limbs and head.
3. Eyes filled with water and look red, pale or wild and eye-balls fixed.
4. Pain in ears with uneasy buzzing or reeling sound.
5. Tinckling sensation in the throat with constricted feeling.
6. Loquacity and delirium.
7. Cough or Croup.
8. Dyspnoea.
9. Aversion to food.
10. Forgetfulness.
11. Tongue is black like coal or charcoal and coarse like the tongue of cow.
12. Limbs are relaxed or paralysed.
13. Watering of mouth with phlegm mixed up with blood or bile or with both.
14. Involuntary movement of head.
15. Thirst for water.
16. Sleeplessness.
17. Pain in the body and heart.
18. Retention of urine, perspiration and fæces or the secretion of these is scanty and at long intervals.
19. General appearance of the patient does not look as thin as it should be.
20. Peculiar sound in throat is generally present.
21. Red spots or rash of circular shape appear on the skin and
23. Fullness in the stomach and abdomen with rapidity of respiration.

Sannipataja type of fever is a very dangerous disease and its treatment is rather too wide in Ayurveda. Here the disease would be dealt with in a comprehensive way so that the readers may have a clear conception in a nut-shell. The disease and its manifestation coincide with either Pneumonia, Typhoid, Enteric fever or Plague commonly known to the general people.

(To be continued).

THE JOURNAL OF AYURVEDA

GYNÆCOLOGY, OBSTETRICS, AND PEDIATRICS OF THE AYURVEDISTS

BY

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(*Continued from our last issue*)

IV. Diseases due to Derangement of Blood Principle (Rakta).

Local Treatment :—(1) Soak 21 times a silk cloth in bile of cow and fish, and insert in the vagina ; (2) insert in the vagina, powders of wine-ferment, and honey ; this cleans the channels, and checks filthy secretion, swellings, and itchings ; (3) give vaginal enema of *Kapha* and *Vayu*-subduing oils (Ch.).

(XXI). RAKTAJA-YONI (Menorrhagia) :—There is excessive flow of 'Menstrual Fluid' (Va.).

V. Diseases due to Derangement of all the Three Humours.

(XXII). SARVAJA-YONI; Syn.—*Sannipataja-YONI* (Vaginitis) —It is incurable (Su.). This is due to indulgence in all kinds of stimulant foods ; there is burning and piercing pain in the vagina, and the discharge is white and slimy (Ch.).

Treatment should be suited to the three deranged Humours (Ch.).

(XXIII). PHALINI, Prakcharana-Yoni (Vaginal lacerations) :—These are symptoms of forced coitus in a girl of tender years ; it is incurable (Su.). There is pain in back, waist, thighs, and the groins (Ch.).

General Treatment :—Give oleaginous diet (Ch.).

Local Treatment :—(1) Treat with vaginal douches of oil cooked one hundred times ; (2) foment and poultice the part with similar oils ; (3) insert in the vagina lac-dyed cottonswabs saturated with oil and pastes of *Pucedanum graveolens*, *Aplotaxis auriculata*, *Aglaia Roxburghiana*, *Salvia plebia*, *Physalis flexuosa*, barley, and wheat (Ch.).

(XXIV). SHANDHI, Shandhita (Eunachs) :—There is no show of menses, no development of breasts ; the vaginal canal is rough ; it is incurable (Su.). The defects of the ovum cause destruction or non-development of the uterus of the foetus ; a woman with such an absent uterus hates coitus and has no breasts ; it is due to *Vayu* and is incurable (Ch.).

(XXV). *SUCHIVAKTRA* (Imperforate, Cribbed Hymen):—The vaginal opening is extremely narrow (a needle-hole aperture); it is incurable (Su.). *Vayu*, deranged by the enciente's Humours, vitiates, on account of its dryness, the genital parts of a female foetus, and causes extreme contraction of its vaginal opening (Ch.).

(XXVI). *MAHA-YONI*; Syn.—*Strastha-Yoni*, *Prasupta-Yoni* (Ruptured Perineum; Displaced Uterus?):—The vagina is very much dilated; it is incurable (Su.). Indulgence in excessive sexual intercourse in an uncomfortable position, or in an uneven bed causes rigidity of the mouth of the uterus and the vagina; the vaginal orifice does not close on account of aggravated *Vayu*, and remains continually open; there is piercing pain; the discharge is bloody, dry, and frothy; the vaginal walls swell out; there is pain also in the bones and the groins; when the vagina or the uterus is displaced it tortures the woman like a thorn or foreign body (Ch.).

General Treatment:—(1) Treat as for *Udavarta* (No. ii); (2) use *Vayu*-subduing drugs (Ch.).

Local Treatment:—(1) Fill the vagina with fat of bear and boar, and with ghee cooked with drugs of the 'Sweet' group, bandage the organ with silk cloth; (2) in order to soften a vagina that is hard and rigid, insert in the vagina a ball of minced-meat or of rice cooked in milk; (3) apply ghee to the prolapsed part (*Prasupta-Yoni*), foment with hot milk, and insert the part inside; apply a ball of minced-meat and bandage till the time of urination (Ch.).

VI. Miscellaneous Diseases of the Genital Organs.

(XXVII.) *YONI-KANDA*. (Vaginal Polypus):—This is due to sleeping during the day, excessive anger, excessive exercise, and excessive sexual indulgence; it may also arise from an ulcer formed through scratching; *Vayu* and other Humours get aggravated and deranged; the polypus is of a blood-red colour mixed with pus, or looks like *Artocarpus Lakoocha* (Ma.).

The polypus is of four kinds:—(a) *Vataja*—the polypus is dry, cracked, and of a variegated colour; (b) *Pittaja*—there is burning sensation and redness, with fever; (c) *Kapphaja*—the polypus is blue, like the flower of *Linum usitassimum* and has itching sensation; (d) *Sannipataja*—the polypus shows signs of all the three Humours (Ma.).

Local Treatment:—(1) Insert into the vagina the powder of Red Ochre, mango seed, turmeric, 'Ranjava' and *Myrica sapida*;

(2) apply the decoction of the three myrobalans, (3) boil flesh of a mouse in oil, and insert a cotton-swab soaked in this oil (Yoga.)

(XXVIII.). SANNIPATODARA :—Sn.—*Dushyodara*, *Tridoshodara*; (Ascites, Ovarian Tumour, Abdominal Cysts, Hydronephrosis, Distended Bladder, Dermoid Cysts, Cysts of the Mesentery, any Abnormal Condition of the Abdomen) :—It may be caused by the 'Menstrual Fluid' entering the stomach, either artificially or naturally (Su.). Blood and the three Humours get aggravated, and cause a very fatal ascites (Sha.).

(XXIX.). BHAGARSHA, (Vaginal or Vulval Condyloma, Adenoma, Fibromyoma, Papilloma, Fibroma, etc.) ;—The deranged and aggravated *Vayu* of the body, incarcerated in the vaginal region of a woman, vitiates the local flesh and blood, and gives rise to crops of soft growths in the passage; there is itching sensation and ulceration; they may come up isolated at the onset, and may assume the shape of a mushroom or an umbrella, secreting a flow of slimy, foul smelling blood (Su.).

(XXX.). TUNI :—This is a sort of pain which gives rise to a bursting sensation in the region of the anus and the genitals (Su.).

(XXXI.). UPADANSA (Syphilis? Gonorrhoea?) :—This is an inflammatory swelling of the genital organ (? male or female); it is due to the action of local Humours aggravated by promiscuous and excessive sexual intercourse; by entire abstinence; by intercourse with a woman who never, or not for long, had an intercourse; coitus during menses; coitus with one having an extremely narrow (*Suchimukhi*) or spacious (*Maha-Yoni*) vulva; coitus with one having rough, harsh, or large pubic hairs; with one whose vagina is studded with hairs along its entire length; coitus with one whose parts are unclean; etc. (Su.).

Dallana finds it mentioned in one text book that *Upadansa* occurs both in men and women; Shrikantha, however, considers this a spurious interpolation (Shrikantha).

(To be continued.)

Reports of Societies, etc.

—:o:—

KOTTAPATAM. .

L. F. Ayurvedic Dispensary,

(*The 7th Anniversary Celebration.*)

The seventh anniversary of L. F. Ayurvedic Dispensary was celebrated on 5-6-33, at 2 p. m. with the President, Taluk Board, in the Chair. In this connection, the Medical Officer and the Staff of L. F. A. Dispensary, Kottapatam were "At Home" to M. R. Ry. P. V. Sarma Garu, President, Taluk Board, Ongole, Member, Dist. Board, Guntur and Proprietor of Zammavaram Estate. The members of the Ongole Taluk Board and the enlightened gentlemen of the village graced the occasion with their presence. The dispensary was decorated with coloured flags and Union Jacks and Ayurvedic Posters and suitable arrangements were made so much so that the guests were very much pleased. The social function was a grand success, owing to the earnest endeavours of the Medical Officer.

A Public meeting was held on 5-6-33 at 8 p. m. in the premises of the Dispensary under the presidentship of M. R. Ry., Pisupati Venkataraya Sarma Garu, President Taluk Board, Ongole,. The Meeting was well attended, though the commencement was at a late hour in the night on account of a meeting of the Ongole Taluk Board, in the "Traveller's Bunglow" on the seashore. After the usual prayer and welcome verses were sung, the 7th annual report of the dispensary was read out by the Doctor N. Kesavacharu A. M. A. C., Medical Officer incharge who gave a short account of the Dispensary for the year under report ending with March 1933. The printed reports were distributed to the audience.

Speeches were made by the leading citizens eulogising the meritorious service rendered by the popular and able Doctor singing the glory of Ayurveda.

The President expressed in his concluding remarks his great pleasure to preside over the celebration of the day and to note the progress of the dispensary as the report disclosed facts and figures. He said that the opinions of the eminent visitors bear ample testimony to the splendid work done by the Doctor, with the Co-Operation of the worthy staff. It was gratifying to learn that the expenditure for treatment according to the indigenous system of Medicine without prejudice to the efficiency was very small. The President also congratulated the Doctor that he maintained the prestige of Ayurveda and enabled the Board to run the Dispensary at a Low Cost, on account of the extra trouble taken by himself in the preparation of Ayurvedic Medicines by means of

STATEMENT No. I.

The Comparative statement of the last two years showing the total Number of patients treated during the years 1931—32 and 1932—33.

| Year | Number of Patients | | | | Daily average attendance | Cost per head per day | No. of labour cases conducted | Admission Caste of Patients | | | Admissions Total. | Remarks. |
|--|--------------------|---------|----------|-------------|--------------------------|-----------------------|-------------------------------|-----------------------------|------|-------|-------------------|---|
| | Males | Females | Children | Grand Total | | | | Hindus | Mah. | O. C. | | |
| 1931—32 | 8552 | 5633 | 6539 | 20724 | 56.78 | Rs. A. P. 0—0—3.12 | 87 | 5512 | 684 | 218 | 6414 | New patients 5432 Old patients 11656 |
| 1932—33 | 7343 | 4819 | 4032 | 17088 | 46.8 | 0—0—3.2 | 103 | 4625 | 612 | 195 | 5432 | |
| Total number of patients treated during the year | | | | | | | | | | | 17088 | Grand total 17088 |

STATEMENT NO II.

| Class of operation. | Nature of operations. | Number of operations performed during the year. | | | Remarks. |
|--|---|---|-----------|-------|-----------|
| | | Primary | Secondary | Total | |
| Removal of foreign bodies | Removal of F. B. (From Ear and Nose etc.,) | 72 | .. | 72 | |
| Bubo | Incised | 1 | .. | 1 | |
| Operation on Abscess | Acute abscess incision | 9 | .. | 9 | |
| Wounds and injuries | Sutched | 4 | .. | 4 | |
| Operation on the skin and | Whitlow incised | 1 | .. | 1 | |
| Subcutaneous tissue. | Sinus | 1 | .. | 1 | |
| | Boils opened | 48 | .. | 48 | |
| | Piles Removed | — | .. | — | |
| | Warts | — | .. | — | |
| | Ulcers (chro) scraped | 5 | .. | 5 | |
| Extraction of loose and caries tooth. | Extracted | 48 | .. | 48 | |
| Rat Bite | Cauterisation | 7 | .. | 7 | |
| Dog Bite | Do | 17 | .. | 17 | |
| Dislocation and Fractures | Set up | 3 | .. | 3 | Not rabid |
| | | 216 | | 216 | |

L. F. Dispensary, Kottapatam,
Dated 4-6-1933.

N. KESAVACHARLU, A.M.A.C.,
Medical Officer.

Raw-drugs purchased and herbs grown in the compound of the dispensary for the purpose. He promised that he would consider the proposal for providing the "In-patient Ward" with one or two beds in due course as the patients increase in number. The meeting terminated with votes of thanks to the chair and to all concerned.

EXTRACTS FROM THE VISITOR'S BOOK.

A short visit to this Dispensary gave me ample evidence and abundant proofs of the extremely enthusiastic work of Dr. N. Kesavacharlu who is in charge of it. The Doctor is very painstaking, earnest in his work and kind and sympathetic to the patients. He has made a very good use of the site around the dispensary by raising a small garden, in which various kinds of medicinal herbs are planted.

Kottapatam,
31-12-1931

(Sd.) M. VENKATARAMYIA, B.A., B. Ed.,
Kanigiri.

While on my way to the seashore I happened to visit the Ayurveda dispensary at Kottapatam. The Doctor in charge is Mr. Kesavacharyulu. The premises of the dispensary is situated amidst a picturesque surrounding. Both the Doctor and the Compounder seem very much interested in the management of the Hospital. Everything is kept clean and tidy. The garden has been planted with some herbs which are utilized for making the Ayurvedic medicines. Dr. Kesavacharlu is very social and a thorough gentleman and seems to be perfect in his technique. I asked him whether his dispensary has got any in-patient beds. He told me that he has been trying with the authorities to provide two beds at least. I wish him success in his attempt. The compounder is very smart and is a man of vast experience. I think that any visitor after seeing the dispensary cannot but praise the enthusiasm of the Doctor and his assistant, the Compounder. I believe the public of Kottapatam feel grateful for the medical aid rendered to them by this dispensary and the staff.

Kottapatam,
5-1-1932.

(Sd.) GHOUSE MOHIDDIN, B. A.,
Superintendent, Finance Office, Hyderabad, Deccan.

It gives me a great pleasure to visit this Hospital, so pleasantly situated and so well kept by the able and energetic Doctor. The Doctor is a man of advanced views and the treatment combines all that is best both in the western and eastern system of medicines. The institution is a thorough success as shown by the large attendance, and the Doctor and the authorities are to be congratulated on the very efficient way everything is managed. This Hospital may well serve as a model for similar institutions which I hope will spring up all over the country.

Dated 2-5-1932.

Sd. H. KRISHANASWAMY,
Lecturer in Chemistry,
Noble College, Masulipatam.

I have to-day inspected the Ayurvedic Dispensary of Kottapatam. The Dispensary seems to be a most useful one to the village, the existence of which is justified by the useful work it does, and also of the importance of the place.

At 9-20 the number of patients on the register is 34 and of this No. 24 being the old patients and 10 new admissions. There is also likelihood of the number being increased in the remaining period of the day. The very surroundings of the Dispensary that are kept so neat and beautiful, are due to the interesting and hard labour of the present Doctor Mr. Kesavacharlu. The medical plants and other crotons that are grown around the Hospital are very pleasing and would no doubt serve as a sort of mental relaxation when he sees them at first sight. It is due to lack of funds that further developments are not possible. An in-patient ward would be a fitting additional help to the village.

Dated 6-5-1932. (Sd.) V. SREERAMULU CHOWDARY, B.A.,
President, Taluk Board.

Dr. N. Kesavacharlu has shown me round his Hospital and I was very pleased with the work being done. It is a matter of gratification that the best of eastern and western systems of medicine is being combined there. It is to be hoped that the medicinal plants will be grown in the hospital compound and research in indigenous drugs will be undertaken. A substantial Government and the private benefaction are urgently required for this purpose and I hope both the Government and the public will encourage work of this sort by substantial grants and donations as is being done in Mysore and the United Provinces. The Doctor in charge of this institution seems to be well fitted for this work, both by his knowledge and enthusiasm.

Kottapatam (Sd.) V. SHIVARAM, M.A., Ph.D., F.R.H.S.
13-3-1932 Head of the Department of Political Science,
Lucknow University.

For a second time in the course of two years, I am having the pleasure of visiting the Kottapatam L. F. Dispensary, and I am glad to notice all round improvement. The medical Officer is as enthusiastic and efficient as ever. The compounder, Mahamad Salliah is activity itself, and the Hospital a perfect sanitorium.

I am indeed very very pleased to note the steady progress of this excellent institution.

Kottapatam, (Sd.) A. JANAKIRAM, B. Sc.
29th Sep. 1932.

On a casual visit to this dispensary I found everything about the Hospital, the building, the surroundings etc. excellently neat and tidy. The patients that happened to go there during my short stay were treated with the best and personal care. I feel that the dispensary leaves nothing to be desired.

Kottapatam, (Sd.) M. V. SUBBAYYA, B.A.L.T.
8-10-1932

THE JOURNAL OF AYURVEDA

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[No. 5.]

I. M. S. and Ayurveda

BY

A. RAMAN, AYURVEDACHARYA.

(A. I. AYURVEDA VIDYAPEETH), HONY. VISITING PHYSICIAN,

B. A. M. HOSPITAL.

The attempt of Col. R.T. Baird, a retired officer of the Indian Medical Service, to discredit in course of tendering his evidence before the Select Committee in London on the 15th November 1933 the Ayurvedic system of Medicine in his over enthusiasm to do more than justice to the cause of Western medicine is deliberate and extremely uncharitable in the face of the facts that even the accredited authorities, held in higher esteem than Col. Baird may claim for himself, have, on many an occasion, condescended to express their valuable opinion on the Eastern system of medicine in most unequivocal terms as would aptly be borne out by the following extracts :—

1. If the physician of the present day would drop from the pharmacopoeia all the modern drugs and chemicals, and treat their patients according to the methods of Charaka, there would be less work for the undertakers and fewer chronic invalids in the world. Dr. G. E. Clarke, M. A., M. D. of Philadelphia.

2. The longer I live in India, the greater will be my appreciation of the wisdom of the ancients, and the more will I learn that the West has still much to learn from the East. Sir Charles Pardey Lukis, Surgeon General to the Govt. of India.
3. I am not ashamed to state that on many an occasion I have succeeded with the indigenous system where Allopathy failed. Col. Ganapat Rai, I. M. S. Andhra Medical Journal.
4. "The Principle of Ayurveda treatment", says Dr. Carpenter, is based on vis Medicatrix Nature or the unerring laws of Nature.
5. During my stay in India I had ample opportunities to see the splendid revival of the oldest system of Healing. It will deserve the place it is rapidly gaining not only in India but other countries of the world. Some regulations should be set so as to save the system from the invasion of the ignorant and the ill-trained. Dr. Walter Seth Kipnes, M. D., Ph. D. of New York,

Col. Baird, belonging as he does to the I. M. S. may perhaps speak with some amount of authority on the Allopathic system of medicine but it is purely a case of presumption on his part to try to spill at the Ayurvedic system about which he knows absolutely nothing. The Colonel's view that the public money spent in fostering the Ayurvedic and Unani systems in India is a waste shamelessly betray the imperialistic tendency of a Britisher in the I. M. S. who cannot change his angle of vision even after spending the best part of his life on the Indian soil, as a leopard cannot change its spot. Col. Baird reminds one of the plights of the presumptuous frog in the well

which once assumed for itself the role of an authority sufficiently qualified to express acceptable opinions on questions affecting the wide world.

I would, however, invite the attention of Col. Baird and others of his way of thinking to the Annual report of the Government of Madras on the administration of the Ayurvedic and Allopathic hospitals wherein will be found statistical evidences that whereas more than 80 per cent of the total number of patients treated under the Ayurvedic system have been completely cured, the percentage of successful cases under the Allopathic system is below 40. And no further comment on this is necessary.

SNAKES AND MEDICINE.

"Native" doctors, expert in the cure of snake-bite, have been subsidised recently by the Palghat Taluk board in this presidency, in an attempt to reduce the huge mortality on this account. The venom of these snakes, especially cobras, has been found to relieve inoperable cases of cancer, as investigated by Taguet of Paris and Manaelessor of New York in 1930. Injections of cobra venom, prepared by the Pasteur Institute of Paris have resulted in arrest of the growth and relief of suffering, but do not claim to cure cancer. A scientist from the Pasteur Institute of Paris is at present in Bombay for collecting five thousand cobras for the extraction of one kilogram of venom, which will be sent to Paris for further experiments.

Original Articles

"VARARUCI AND CANDRA GOMIN"

BY

DR. GIRINDRA NATH MUKHERJEE, B.A., M.D., F.A.S.B.,

VISHAGACHARYA.

Calcutta.

VARARUCI.

(Sixth Century A. D.)

Vararuci was one of the nine gems in the court of King Vikramaditya, who ascended the throne in 466 Saka or 544 A. D. The nine wise men were Dhanvantari, Ksapanaka, Amara Sinha, Sanku, Vetala Bhatta, Ghatakarpara, Kalidasa, Varaha Mihira and Vararuci.

धन्वन्तरोः क्षणकामरसिंहशङ्ख, वेतालभट्ट घटकपर्पर कालिदासाः ।

ख्यातो वराहमिहिरौ नृपतेः सभायां रत्नानि वै वररुचिर्नव

विक्रमस्य नवरत्नं ॥ इति

His works.—

1. योगशता—Yogasata.—On Materia Medica in 102 verses. By Vararuci.

The *Berlin Cat.* no 959—960, and *Burnell Tanjore Mss.* p. 67b, ascribe the text of the *Yogasata* to a Vararuci, whilst *Berl. Ct.* 961 contains the commentary (i. o. 2765) without the author's name. In the *Oxford Mss* (*Aufr. Cat.* no. 752) the author of the *Yogasata* is not mentioned.

According to Prof. Bendall, *Cat. of Sanskrit, Pali and Prakrit Books*, in the British Museum (where two different editions of the *Yogasata*, in the Sinhalese character are mentioned) an examination of the two *Mss.* of the India office has shown the Ceylon text to represent the older of the two known redactions, and to correspond with the text of the *Mss.* in all but the last two stanzas.

Commentaries :

I. योगशतभाष्य ।—*Yogasatabhasya* : a commentary on the *Yogasata* by Amitaprabha.

The text with the commentary begins :—

कृत्स्नस्य तन्त्रस्य गृहितधासुश्चिकित्सितादिप्रश्रितस्य दूरं ।
विदग्ध वैद्य प्रतिपूजितस्य करिष्यते योगशतस्य वन्धः ॥

अनेन प्रतिज्ञावाक्ये नायुर्वेदः प्रतिपादितः । तत्र च त्रितयं वक्तव्यं
चिकित्सानिदानं लक्षणं चेति । मया योगशतस्य वन्धः करिष्यते
युज्यते । एभिरारोखेनातुग इति योगः किन्नोद्भादिप्रभृतयः । तेषां
शतं योगशतं तस्य संवन्धसंग्रहः एकत्राभिधानं करिष्यते इत्यर्थः ।

The commentary ends :—

न विद्यते रोगोऽस्य तत्प्ररोगं निर्विकारमित्यर्थः । इति अमितप्रभ
विरचितं योगशतभाष्यं समाप्तं । संव ७३० to ॥

Mss :—

r. o. 2756. (1651 A. D.)

Berl. Cat. 959—960.

Tanjore Mss. P. 676.

Berl. Cat. 961.

Ox. Cat. 752.

A. M. P. 155.

Bendal Cat of Sanskrit Mss. in the British Museum.

2. योगशतटीका । *Yogasatatika* : a commentary on *Yogasata*
by Rupanyana.

Begins :—

नमः कर्णोल्लसत्कान्ति पुञ्जपल्लवशालिने ।

जगन्नगरनिर्माणा पूर्णकुम्भायसंभवे ॥

चिरं जयन्ति हेरम्बकपोलयदधीचयः ।

मज्जन्ममधुकर व्यूहव्याहार मुखरश्रियः ॥

सारत्वात्सार दुष्टान्तादल्पत्वादल्प मेधसं ।

उपयुक्तमिदमुक्तमुभयेसां भविष्यते ॥

युगायुगार्थतत्त्वज्ञैः प्रयुक्ताः स्युर्गदच्छिदः ।

तेषु टीकासूतः कर्म सञ्चतिः स्यात् सतोयदि ॥

Ends :—

तेन कृत्वा इत्थं भुतं जगदरोगं भवत्विति सम्बन्धः ॥ उपजातिवृत्तं ।
इति रूपनयनकृता योगशतटीका समाप्ता ।

वर्जयेत्तु दिवास्वप्नं योषित्सङ्गं वह्दकं ।

जल्पं शीतं निशा जाप्यं व्यायामं शोधनं तथा ॥

वार्त्ताकं चपलोदुं(र) च कन्दशाखां परित्यजेत् ॥

इति रोगीणः पथ्यविधिः ॥

Authors quoted :—

Caraka.

Susruta.

Kasyapa.

Jayasena.

Jaijjata or Jejjatacarya.

Bhadra Sanovah (? Bhadra Saunaka).

Bheda.

Bhoja.

Vrddha Bhoja.

Siddhasarakara.

Bhattaraka Hariscandra.

Harita.

Vangasena.

Mss. r. o. : 2757. (1500—A. D.

A. M. P. 155.

Bik. Mss : 1452.

3. *Commentary on yogasata* : By Surya Sena or Purna Sena.
Abhidhanacintamani or Yogasatatika.

Mss. Berlin Mss. 962 (Surya Sena)

Cat. Cat : (Purna Sena)

L. 3128. 4017.

Begins :

श्रीवर्द्धमानं प्रणिपत्य मूर्द्धा

जनस्य सर्कस्य निरोगहेतोः ॥

श्रीपूर्णसेनेन सुबोधनार्थं

प्रारभ्यते योगशतस्य टीका ॥

अथ जीवा आदिनिधनास्तेषां जीवानां आहारमन्वाहतशीतातपर्व्या-
निलविषमाशनानिद्रादितिर्याधय उत्पद्यन्ते । तेषां व्याघातां प्रतीकारार्थं

पुरासर्व्वत्रैर्भाषिताद्द्वैद्याशास्त्रात् सारयोगान् विविच्य योगशतं कतुकामो
वररुचिः शास्त्रादौ प्रतिज्ञां करोति कतुस्त्रयेति । कतुस्त्रस्य निरवशेषस्य
चरकवाग्भट्टशुश्रुतस्य तन्त्रस्य कल्याणादि वैद्याशास्त्रस्य इत्यादि ।

Ends :—

मूत्रपुरीषयोः स्थिरत्वेन प्रवर्त्तनं ।
एतानि श्लेष्मरोगे जानाति ।
एतानि लिङ्गानि च तत्कृतानां
सर्व्वामया * * * चैकनान्नाम् ।
कश्चित् * * * प्रप्तिनिरोधपूर्वं
संज्ञान्तरं येन तु संप्रयाति ॥

Colophon :—

इत्यभिधानचिन्तामनियोगशतटीका सम्पूर्णा ।
वररुचिकृतयोगशताभिधानवैद्यकनिबन्धस्य व्याख्यानम् ।

Contents :—

In Mss L. 3128. Sripandita is mentioned as the the author of
Yogasata.

The end of the *yogasata* :—

मूलस्य—

गुणार्धिकं योगशतं निबध्य प्राप्तं मया पुण्यामिहोत्तमञ्च ।
नाना प्रकारामयनोद्धभूतं कतुस्त्रं जगत् तेन मतत्वरोगम् ॥

टीकायाः—

एतानि लिङ्गानि च तत्कृतानां सर्व्वामया * * * चैकनान्नां—
कश्चित् प्राप्तिनिरोध पूर्व्वसंज्ञान्तरं येन तु संप्रयाति ॥

Colophon :—

इति श्रीश्रीपण्डितविरचितं योगशतकं समाप्तं ।
इति योगशतग्रन्थटीका सम्पूर्णा ।

II. Vararuci was a well-known poet. He is the author of
Sundara Kavya in Sanskrit.

CANDRA GOMIN.

(About 700 A. D.)

Candra Gomin, (Vide 'Taranatha's *Geschichte des Buddhismus*
von Schiefner, pp. 145—146, 148—158; and *Pag-sam-jon-zang*
edited in the original Tibetan by 'Sarat Chandra 'Das, Calcutta, pp.
CC-0. In Public Domain. Gurukul Kangri Collection, Haridwar

95—96.) called in Tibetan: *Zla-wa dge-bsnen*, was born in a Ksatriya family in the east at Varendra (modern Rajshahee in Bengal). He was endowed with a very keen intellect and acquired distinction in literature, grammar, logic, astronomy, music, fine arts and the science of medicine. Under Acarya Sthiramati he learnt the *Sutra* and *Abhidharma Pitakas* of the Buddhist scripture, and was converted to Buddhism by the Vidyadhara Acarya Asoka. (Acarya Asoka was the author of a logical treatise called *Samanya-Dusana-Dikprakasika*, a short treatise on the refutation of generality, lately recovered from Nepal.). He had an ardent faith in the Buddhist god Avalokitesvara and the goddess Tara (for Candra Gomin's "*Arya-Tara-antarbali-vidhi*", vide Satishchandra Vidyabhusana's *Sragdhara-stotra*, Introduction, pp. xx, xxi.). He was offered in marriage a daughter of the king of Nalendra. Being told that she was named Tara, which was the name of his tutelary deity, he thinking it improper to accept her hands shrank from her with fear. Upon this the king of Varendra became angry and put Candra Gomin into a chest which was thrown into the Ganges. The chest was carried down until it stopped at an island at the place where the Ganges flows into the ocean. Candra Gomin with deep reverence offered a prayer to goddess Tara by whose blessing he got out of the chest. He resided in the island which was in course of time named Candra-dvipa (Candra dvipa is situated in the district of Barisal in South-Eastern Bengal at a place where the Padma, which is a main outlet of the Ganges, falls into the ocean. Varendra in which Candra Gomin was born is identical with the Rajshahee division in North-Eastern Bengal through which the Padma flows.) or the island of Candra. He as a Buddhist devotee (upasaka), established there stone-images of Avalokitesvara and Tara. At first only fisherman settled in the island, but afterwards other people came to live there. Gradually the island became a town.

Candra Gomin thereupon went to Ceylon and on his way back found in Southern India in the house of Vararuci Naga-Sena's (Patanjali's) Bhasya on Panini's grammar. Finding that it contained "many words but few thoughts," he himself composed a commentary on Panini, which was named *Candra- \acute{v} yakarana*. (for Candravyakarana vide Satis Chandra Vidyabhusan's "*Sanskrit works on Literature, Grammar, Rhetoric and Lexicography, preserved in Tibet*" in the *Journal of the Asiatic Society of Bengal*, new series, Vol. iii, No. 2, 1907. The *Candra- \acute{v} yakarana* in the original Sanskrit

has been printed in Germany.). Afterwards he came to Nalanda—the store-house of knowledge—and met there Candrakīrti, the famous commentator on the Madhyamika Philosophy of Arya Nagarjuna. Candrakomin himself was a follower of the Yogacara system expounded by Arya Asanga. While Candrakīrti and Candrakomin entered upon philosophical discussions people used to observe. (See *pag-sam-jon-zang*, p. 96). “Alas! the text of Arya Nagarjuna is medicine to some but poison to others, whereas the text of invincible Arya Asanga is very ambrosia to all men”. It is further stated that into a well at Nalanda, Candrakomin threw the original manuscript of his grammar, thinking that it was not better than the one which Candrakīrti had written. At that time Tara and Avalokitesvara appeared before him saying: “Though Candrakīrti is overwhelmed with pride as a sage, your work is more useful than all others and will do immense good to the world.” They raised the manuscript from the well, which was thence reputed as “Candra’s well” (in Sanskrit: Candrakupa and in Tibetan: Tsandrahi-khron-pa), the water of which was wont to be drunk by people in the belief that thereby their intellect would become sharp. Candrakīrti was, however, a great admirer of Candrakomin. When the latter arrived at Nalanda, the monks refused to give him a reception, saying that it was not proper for priests to welcome a mere devotee (*upasaka*). Hearing this, Candrakīrti brought three chariots, two of which were occupied by himself and Candrakomin respectively, while in the third was placed an image of Manjusri, the Buddhist god of learning. The chariots passed through the town in a great procession attended by the whole body of priests who came really to recite hymns to Manjusri, but apparently to accord a fitting welcome to Candrakomin. (vide *Pag-sam-jon-zong*, pp. 95—96.)

Candrakomin lived at a time when Sila, son of Sri Harsa, reigned. During this time, king Simha of Licchavi dynasty reigned in Varendra. The famous poet Ravi Gupta was a contemporary of Bharsa, son of Simha. Sri Harsa seems to be the same as king Harsa Vardhana who was a contemporary of Hwen-thsang and reigned in 647 A. D. His son Sila seems, on a rough calculation, to have reigned in 700 A. D. Jaina Hema Chandra Suri, who lived during 1088—1172 A. D., refers to Candrakomin while Jayaditya, (Vide professor F. Kielhorn’s “*Indra Gomin and other grammarians*” in the *Indian Antiquary*, Vol. xv, June 1886, pp. 181, 184) the famous author of the *Kasikavṛtti*, who died in

661—662 A. D., (vide Takakusu's I—tsing, p. Lvii,) does not mention him. This may be explained on the supposition that Candra Gomin lived after Jayaditya, but preceded Hema Chandra.

Candra Gomin was the author of the following work on Logic: *Nyayaloka-Siddhi*, called in Tibetan: *Rigs-pa-grub-pab-sgron-ma*, signifying "a lamp of logical reasoning". The Sanskrit original of this work appears to be lost, but there exists Tibetan translation (I have used the India office copy) in the *Tangyur*, Mdo, Ze, folios 200—201. The translation was prepared by Pandita Sri Sita-prabha and the interpreter-monk Vairocana.

Candra Gomin's Medical works :—

1. *Commentary on the Susruta Samhita*: Srikantha Datta, in commenting on the *Vrundatippani*

हेगुण्यं नादकेऽप्यत्र भागमात्रोपलक्षणात्

in the *Arsadhikara* of *Siddhayoga* says:

आदकेऽप्यत्र न हेगुण्यमिति सुश्रुतस्कारापादशध्याये कैश्चित् व्याख्यातम् । तच्च ते हि चक्षुषु न पश्यन्ति मनसापि न पश्यन्तीति वदता टीकाकृता गोमिना दूषितम् ।

Thus we learn that Gomi was a commentation of the *Susruta Samhita*.

His other works are :—

1. *Candra Vyakarana*—On Grammar.
2. *Nayaloka-Siddhi*—On Logic.
3. *Arya-Tara-antarabati-Vidhi*—Poem on the praise of the goddess Tara.

FEVER IN AYURVEDA

BY

KAVIRAJ A. C. KAVIRATNA

*Calcutta.**(Continued from our last issue.)*

In the foregoing pages it has been shown that in *Sannipataja* type of fever, Vayu, Pitta and Kapha are deranged and consequently this type of fever brings out the mixed manifestation of *Vataja*, *Pittaja* and *Slesmaja* fevers. In order to simplify the complexity and wide scope of *Sannipataja* fever, Ayurveda subdivides it into thirteen classifications for the purpose of accurate prognosis, viz. 1. Bispharaka (विस्फारक), 2. Asukari (आसुकारी), 3. Kampana (कम्पन), 4. Babhru (बभ्रु), 5. Shighrakari (शोथकारी), 6. Vallu (वल्लु), 7. Kutapakal (कुटपाकल), 8. Sanmohaka (सन्मोहक), 9. Pakal (पाकल), 10. Yamyā (याम्य), 11. Krakachha (क्रकच), 12. Karkata (कर्कट) and 13. Baidarika (वैदारिक).

(1) Bispharaka type :—In this type the following symptoms are usually present :—

1. Difficulty of breathing.
2. Teasing and tinkling cough.
3. Loquacity.
4. Fainting.
5. Delirium.
6. Trembling and Tremor.
7. Yawning.
8. Bitter taste in mouth.

This type of fever is dangerous and almost invariably fatal.

(2) Asukari type :—In this type of *Sannipataja* fever the following symptoms manifest :—

1. Diarrhoea.
2. Forgetfulness.
3. Sour taste in mouth.
4. Red circular spots or rashes appear on body.
5. Extremely burning sensation all over the body.

(3) Kampana type :—In this type of fever the following symptoms are marked :—

1. Languid feeling of body.
2. Talkativeness.
3. Unavoidable sleep, rather drowsiness at night.
4. Loss of movement of eye balls.
5. Brightness of facial appearance.

(4) Babhru type :—In this type of fever manifestations are as under :—

1. Irritableness.
2. Thirst for water.
3. Dry and parched mouth.
4. Drowsiness.
5. Aversion to food.
6. Cough and difficulty in breathing.
7. Patient looks very much debilitated.

(5) Shighrakari type :—In this type the following symptoms are marked :—

1. Fever with chill.
2. Sneezing.
3. Thirst for water.
4. Colic pain.
5. Total absence of sweat.
6. Stupor.
7. Panting.

This type is fatal and death occurs in 24 hours.

(6) Vallu Type :—In this type of fever the following symptoms are marked :—

1. Excessive heat and burning sensation internally while there is chilliness outwardly or heat and chill in alternation.
2. Right side of the body is generally painful with stitching sensation.
3. Thirst for large quantity of water.
4. Constricted feeling in the heart, head and throat.
5. Expectoration of phlegm and Pitta (biles) and these are spitted out with great difficulty.
6. Eruption resembling bites of wasps or sting on body.

(7) Kutapakal type :—In this type the under-mentioned symptoms are usually present and the patient hardly survives 24 hours from its attack. The ancients used to attribute the disease to evil spirits of various description.

1. The Eye-balls are protracted and paralyzed and devoid of their movement.
2. Continuous panting and tremor are invariably present.

(8) Sanmohaka type :—In this type the following symptoms are observed :—

1. Loquacity.
2. Tremor.
3. Fainting.
4. Absent mindedness.

(9) Pakala type :—In this type the symptoms are as under :—

1. Loquacity.
2. Fainting or loss of consciousness.
3. Intense head-ache.
4. Blood discharges from mouth and nostrils.
5. Eyes look pale and eye-balls fixed.
6. Diarrhoea sets in followed by dyspnoea and hiccough.
7. Patient loses consciousness and becomes delirious.

(10) Yamy type :—In this type the following symptoms appear :—

1. Burning sensation in heart.
2. Secretion of pus and blood per rectum and urethra and sometimes pus and blood are expectorated out per mouth and nostrils.
3. Teeth become loose.
4. Other symptoms described above may also be present indicating fatality of the case.
5. Loss of memory.
6. Haemoplagia (semi paralysis).
7. Vayu system in this type of fever appears to be deranged in greater extent than Pitta and Kapha and consequently almost all the complication of Vata derangement predominates.

(11) Krakachha type :—In this type all the above symptoms are present together with total loss of all sensation of sensory organs and death usually follows heart failure.

(12) Karkata type :—In this type, an indescribable internal heat and burning sensation are felt by the patient. The facial appearance assumes deep colour as if it has been painted with a deep coating of vermilion and a smart darting pain is felt by the patient. Tongue is coated and uneven like cow's tongue. Diarrhoea sets in ; urine and stool involuntarily are passed out. Limbs gradually become relaxed, respiration increases and hiccough lastly appears and the patient sinks.

(13) Baidarika type :—In this type the following symptoms are marked :—

1. Stitching pain in the loin.
2. Burning sensation in the body.
3. Exhaustion and languor.
4. Fainting and loss of sensation.
5. Cough or Hiccough.
6. Inflammation of the glands of the ear.

This type of fever becomes incurable if neglected at the onset and recovery is remote if proper treatment is not done within three days time from the attack.

In the treatment of Sannipataja type of fever, the patient must not be allowed to drink cold water. Only boiled water when tepid warm should be allowed.

7th, 9th, 11th and 14th days are considered to be days of crisis.

The technique of treatment should consist of the following as per Sloka of Ayurveda quoted below :—

लङ्घनं बालुकास्त्रेदो नस्यं निष्ठिवनं तथा
 अवलेहोऽन्ननञ्चैव प्राक् प्रयोज्यं विदोषजे
 सान्निपात ज्वरे पूर्वं कुर्यादामकफापहम् ।
 पश्चात् श्लेष्मिणि संचिनी समयेत् पिचमारुतौ ॥

Fasting should be insisted upon the patient. Medicated fomentation of fried *Sand* on the body in order to accelerate circulation and help absorption, medicated snuff to arouse consciousness, medicated paint on the tongue to increase spitting, medicated electuary to cope with Hiccough, dyspnoea and chocking sensation, medicated cosmetic to arouse from stupor and medicated Ointment should be used to remove the brain troubles and loquacity.

Preparation of Fried Sand Fomentation.

Fry Sand on a pan over fire and put it in small bundles (*Putuli*); dip the bundle in *Konjee* and foment the body. This fomentation helps absorption, accelerates circulation, removes pain and arrests head-ache.

Preparation of Snuff.

Take five salts, *Sajinabeej* (seed of *Moringa*), mustard and *Kur* (*Susurea Auriculata*) in equal parts and crush these to fine powder, then add goat's urine and get it dried in the sun. This snuff dispels stupor and drowsiness.

There is another preparation of snuff for the purpose, which is as under :—

R/

Moulsar

Saindhab (Rock salt)

Botch (*Acorus Root*)

Marich (*Piper Nigrum*)

Pipul (*Piper Longum*)

Take equal parts of the above and crush these to fine powder and rub well in water and when dry it should be used for medicinal purpose.

The administration of the latter snuff would also serve the purpose equally well.

Nistiban. (Spitting):

Preparation of the paint for the tongue :—

- | | | | |
|----------------------------------|-----|-----|-----|
| (a) Saindhab Labanam (Rock Salt) | ... | gr. | V. |
| Ginger juice. | ... | m. | XX. |

Mix these well together and apply as Ointment for Tongue.

- | | | | |
|----------------------|-----|-----|------|
| (b) Draksha (Grapes) | ... | gr. | XX. |
| Clarified butter | ... | gr. | XXX. |

Mix these well together and paint the tongue in case there is any fur or eruption on the tongue.

विनापि भेषजैर्व्याधिं पथ्यादेव निवर्त्तते

नतुपथ्यं विद्भिनां भेषजानां शतैरपि ।

हिताशी-स्वान्मिताशीस्यात् कालभोजी जितेन्द्रियः

पश्यन् रोगान् सर्वान् बुद्धिमान् विषमाशदिभिः ।

Charakam.

Importance of diet.

Judicious selection and administration of dietary are of paramount importance to the diseased. From the above Sloka it would

be seen that diseases are incurable without proper diet inspite of the best skill of physician in respect of his diagnosis and prescriptions. The persons adapted to regular habits, moderate eating and proper and suitable selection of dietary would overcome many possible diseases while those disregardful of the regularity of habits and dietary would fall easy victims to many fearful diseases according to intensity of toxin resulting from the food or drink.

Besides the above, the purity of mind depends on the purity of dietary and high mental and cultural thoughts are surely outcome of pure mind. Vide couplet bellow.

आहारशुद्धीसत्वशुद्धिः सत्वशुद्धौ ध्रुवा स्मृति ।

B. G.

It would be a futile attempt to train the body through medicines, fresh air, sun shine etc. only, if there is neglect to train the mind as well simultaneously.

Ayurveda considers that the influence of mind is far more profound than influence of body on the mind although the close interdependence between mind and body is not ignored. Lives of heroes and myrters conclusively prove the superiority of mind to all the influences of body. Their iron will knew no bending, but on the other hand grew stronger to face the physical torture of severest nature. Their conviction could not be severed even when their body was burnt to ashes. Further it is a matter of common occurrence to observe that even the strongest body becomes paralysed in a moment's time after some fear or mental shock.

The study of Tridosha theory and the present system of synthetic Endocrinology would show that body can greatly influence the mind by virtue of ill-balanced equilibrium, defunct or deficient active principle of gland secretion, while emotions much more favourably affect our body according to their intensity. Violent emotion may result in death within an twinkling of time without any predisposing defunct or deficient endocrine secretion. That is the reason why so much stress is given in respect of selection of intake of food and drink. Food and drink are the exciting causes for displacement of the equanimity of Vayu, Pitta and Kapha, the primary factors of human ills.

चक्षुः शितं दिवा विधीयते तस्य यः स्थविष्ठोधातु

स्तत् पुरीषं भवति यो मध्यमस्तुमांसः योजनित तन्मनः ॥

The boiled rice when taken in is assimilated in the following process :—Superficial portion is converted to faeces and the middle portion to flesh while, its dynamic portion is embeded as it were with mind.

This goes to show clearly that food directly influences the mind as well as Dhatus. So proper selection of food would keep the mind in its proper order and Dhatus in their proper function and these performing their respective function in harmony would naturally keep the person healthy and hearty.

In diseases, care must be taken to reject foods and drinks harmful to mind and Dhatus then prevailing, to achieve the desired object.

It has been shown above that Vayu, Pitta and Kapha getting out of order singly or in combination with one another, flesh becomes diseased. So the food should be chosen in accordance with the derangement of Dosha or Doshas. In order to cut short the matter which is too wide for discussion in a subject like the one under consideration, I would give here the general articles of food which are to be given in fever and what not according to aggravated or attenuated Dosha or Doshas for guidance of my readers.

The ancient Ayurvedists made an exhaustive survey of the various kinds of food-staff which are in vogue in the different parts of India in relation to individual temperament, habit and climate of the country. The practitioners of medicine in India would do well to study the chapters in Ayurveda, as ill-proportional and deficient dietary would always undermine health and adversely influence the mind and constitution. In this connection the remark made by late Sir Pardey Lukis which was published in the October 1918 issue of the British Medical Journal would not only be amusing but interesting to read. It runs "Study Indian prejudices regarding diet and don't consider these prejudices as nonsensical".

Lt. Col. Knowles in the November 1924 issue of the Indian Medical Gazette observed that "Its (Ayurveda's) dietetics are based on Indian dietary and meets Indian requirements as to caste, creed and constitution".

In Ayurveda, food staff are classed according to immediate and distant effect on the system while the study of food in Western Medicine is based primarilly on chemico-physiological tests only.

Satisfactory selection of food would be practically impossible unless Rasa (Taste of Substance), Guna (Property of substance), Birjya (Immediate systematic and dynamic effect), Bipaka (Reactionary taste in the mouth following chemical changes these undergo in the stomach) and Probhaba (specific effect) of the articles are fully conceived.

Strictly speaking there are six kinds of taste, viz. 1. Madhura (Sweet), 2. Amla (Acid), 3. Labana (Saline), 4. Tikata (Bitter), 5. Katu (Pungent) and 6. Kasaya (Astringent).

Rasa (Taste)

Madhura Rasa (Sweet) promotes tissue growth, increases longevity, stimulates activity in the nerve, improves complexion, strengthens the system and tones up the heart. Now sugar is estimated to be a cardiac stimulant by the Western System of practitioners. Sweet Rasa is propetiser of Vayu and Pitta.

If sweet is taken in excess it would produce obesity (bulky body), impair appetite, harbour intestinal worms, enfeeble digestion by weakening Pitta secretion and give rise to Kaphaja diseases such as languor, sleepy tendency, flatulence, difficult breathing and diabetes due to defunct Pitta in the system.

Therefore where Pitta is attenuated but Kapha is predominant sweet should be restricted.

Amla (Acid) substance promotes salivation, digestion and appetite, checks wind and fermentation stimulating action of Liver creating acid reaction in the stomach. It increases Pitta and decreases alkalinity of blood.

Intake of excess of acid would reduce strength, induce dropsy, injure teeth enamel, affect eyes and help supuration and ulceration.

This concludes that when Pitta is aggravated acids should be restricted.

Labana (Saline) substance promotes salivation and digestion and aggravates Pitta and Kapha and draws water from blood.

Intake of more salt induces anaemia, oedema, dropsy, skin diseases, thirst, haemoptysis etc.

Tikta (Bitter) substance promotes partial loss of sensation of tongue, removes weak digestion, purifies blood, checks skin diseases and eliminates catarrh.

Massive doses of bitter produce numbness or partial paralysis, headache, pain in bones, bad taste in mouth, thirst and weakness and cause nervous excitability.

Katu (Pungent) substance promotes burning sensation on tongue, mouth, nose and on eyes. It causes increased flow of salivation and lachrymation. It is hot for the system, aggravates Vayu and Kapha system while it propitiates Pitta. It is parasiticide, digestive and reduces obesity.

Excessive use would cause dryness of throat, palate, lips, vertigo and burning sensation, diminishes strength and weight.

Kasaya (Astringent) substance lessens mucous secretion and causes dryness of mouth, palate and produces choking sensation in the throat.

Over doses may cause heart diseases, tinckling sensation, convulsion, dryness of mouth and tympanitis.

The following twenty kinds of Guna (properties) of substance are admitted by the Ayurvedists for the purpose of determining the virtues of the substance for medicinal and dietetic purposes:—

1. Guru (heavy and difficult to digest), 2. Laghu (Light for digestion), 3. Snigdha (emollient), 4. Ruksha (irritating), 5. Tikсна (acid), 6. Slesma (glossy), 7. Sthira (Stagnant), 8. Sara (mobile), 9. Pichhil (Slimy), 10. Bishad (Wanting in emollient Substance), 11. Sita (cooling), 12. Ushna (heating and Stimulant), 13. Mridu (Mild in action), 14. Karkas (strong in action), 15. Sthula (Quantitative), 16. Suksma (qualitative), 17. Draba (Liquid), 18. Suska (Drying), 19. Ashu (quick in action) and 20. Manda (slow in action).

Birjya is of 2 kinds, viz., Usna Birjya & Sita Birjya and their systemic properties is heating & cooling respectively.

Bipaka is reactionery taste produced from chemical changes in the stomach and may be either sweet, acid or of pungent taste.

Probhaba is the specific action of the sum total of the combined properties of substance.

From the above it is seen that ill-balanced or improper selection of food would upset the system and endanger life while a well-ordered and well-appointed food nourishes and activates the system and eliminates the waste product.

Besides above, the physician in arriving at a selective food should take into his consideration the *prakriti* (temperament of individual) and his age as well as sex .

It is the most difficult task of a physician to accurately estimate the *prakriti* (temperament of the individual) unless he is in an advantageous position to come in contact too frequently with the patient to study his individuality. The temperament of an individual would be found in either one or the other of the three viz. Vayu (nervous temperament), 2. Pitta (Billious temperament) and 3. Kapha (Phlegmatic temperament).

The age is also to be considered only to decide the quantity of food and predominance of Vayu, Pitta and Kapha.

In children, Kapha is predominant, in youth Pitta prevails while in old age Vayu plays an upper-hand.

The time is also not negligible, as temperament changes with seasons and hours.

Kapha is more predominant in the morning which gradually disappears with the advance of day making room for Pitta to progress to its maximum height at noon, when Pitta slowly commences to diminish Vayu becomes prominent. Then again in the evening Kapha comes in to last for about one third of the night, then Pitta prevails and reaches its maximum at mid-night while Vayu prevails in the last third of the night.

Vayu *prakriti* dislikes cold, is of deficient memory, weak digestion, disturbed sleep, of irreligious mood, with a tendency to lead a luxurious and easy-going life, and is generally tall and thin in appearance. His eyes look small, dull and grey. Sweets, acids, saline and hot things are usually preferred.

Pitta *prakriti*—the individual is physically and mentally strong, intelligent and of strong morals. Cold, sweet, astringent, bitter etc. are preferred. He is thirsty and very hungry, sweats profusely, emitting disagreeable odour, slight excitement turns his eyes red. Palms of hand and soles of feet and face are hotter than body to the touch. Hairs on the body is scanty and constitution is strong.

Kapha *Prakriti* is enduring in nature, not very much affected from hunger, thirst and sorrow. He is intelligent, truthful, god-fearing, amiable in disposition and tolerant in spirit.

Bitters, pungents, dry and hot are preferred by Kapha *Prakriti* individual.

In practice we very seldom meet with the extreme type of Prakriti. In strict sense we observe only mixed type of symptoms decernable on the predominance of one group of symptoms from other.

Prakriti is also detectable on the knowledge of perception of pulse according to the principle of Ayurveda briefly described in the foregoing pages,

Sannipataja fever is infectious according to the principle of Ayurveda vide couplet below :—

प्रसङ्गात् गात्र संस्पर्शात् निश्वासात् सहभोजनात्

एकग्रथासनश्चैव वस्त्रमाख्यानुलिपनात् ।

ज्वरश्च कुष्ठश्च शोषश्च नेत्रभिस्यन्दएव च ।

श्रौपसर्गिकि रोगाश्च संक्रामन्ति नरान् नरम् ॥

Water, food, flies and fingers also play an important role in spreading infection. So it is advisable to use drinking water well boiled. Milk must be well boiled with water and foods well cooked to remove suspicion in respect of possibility for infection of bacillus. Hands must not be allowed to touch foods unless these are thoroughly washed, preferably with disinfectants. Practice of putting in fingers to mouth and nose should be rigidly discarded.

Bed, clothing and other fabrics, contaminated with excreta of patients, are really source of danger to health. These should never be allowed to remain unboiled for the purpose of disinfection.

Infections run from one person to another through kissing, soiled hands, remnants of food, towels, cloths, cups, spoons and infected thermometers. These should not be injudiciously used.

Flies live on decomposed substances and on faecal matters and are apt to contaminate foods conveying infection.

The food must be kept out of the sick-room and well covered.

Insist on general disinfection of the room after conclusion of the case.

An accurate and early diagnosis in accordance with the principle of Ayurveda is absolutely essential for the occasion as well as after the conclusion of the trouble.

Visitors should be restricted to the sick-room which is desired to be screened and well ventilated.

Stool, urine, sputum etc. and excreta should be carried out with due precaution.

Patient should be kept on fast in accordance with the injunction of Ayurveda, due regard being paid to time, condition, age and strength of the patient. During the acute condition, solid foods should be restricted or until the fever is over. Loading the stomach would put the system to double work, viz. to cope with the influx of food-stuff and to eliminate the toxic waste already accumulated within.

When the system is in a state of unbalanced equilibrium, perfect rest is absolutely necessary for quick restoration to normality.

Medicated drinks are of great value in acute stage of fever and one should be carefully selected to suit the condition and soil of the individual patient.

GYNÆCOLOGY, OBSTETRICS, AND PEDIATRICS OF THE AYURVEDISTS

BY

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(*Continued from our last issue*)

TUMOURS OF THE UTERUS :—

Ectopic Gestation, Blood Mole, Carnous Mole, Fibroma, Fibromyoma, Myoma, Benign or Malignant Growth, Ovarian Tumours (ovaries were not recognised in those days), etc. (*Rakta-Gulma*).

Tumours are ball-like structures in the abdomen ; they are caused by the aggravation and derangement of the Root-Principles of the body (*Dhatu*) ; they are round or spheroid in shape, fixed or shifting in character, and vary in mass and size ; the tumour is called a shrub (*Gulma*) because of its shrub-like outline, and because the root or base is not capable of proper definition ; like a bubble of water, it is a self-contained agglomeration of the deranged Humour ; there is no suppurative process in its mass (*Su*).

RAKTA-GULMA :—In females, there is a class of tumours (Ovarian ? Uterine ; Ectopic gestation, etc.) connected

with the vitiated condition of 'Menstrual Fluid' (*Rakta-Gulma*) (Su.). *Rakta-Gulma* occurs only in females, and not in males because it appears only in the uterus; males have neither uterus nor the menses (Ch.). The tumour does not occur in girls, and in old women in whom the menses have disappeared (Ma.).

Vijaya-rakshita says that the word *Rakta* is to be taken in the sense of 'Menstrual Fluid', and does not mean the Root-Principle Blood (*Rakta-Dhatu*). Bhattahara-Chandra says that by '*Raktaja*' both tumours in men and women are meant; Jejjata and Gayadasa do not accept this view. Ksharapani says that the tumours that arise from 'Menstrual Fluid' do not occur in men; other tumours originating from the Root-Principle Blood (*Rakta-Dhatu*) occur both in men and women. Vapyachandra says that derangement of the three Humours affects the Blood, which in turn is deranged and causes a Tumour (Ma.).

Causes.—The *Vayu* of a woman (a) who is newly delivered, (b) who has miscarried, and (c) who is in her menses, is deranged by taking unwholesome food; the flow of the 'Lochia' or 'Menstrual Fluid' is suppressed and causes a tumour (Su.). Suppressing the desire for urination or defæcation (Distended Bladder), taking unwholesome food in puerperium, or after abortion, or taking *Vayu*-generating food during the menstrual period, the *Vayu* is deranged; it enters through the vagina, and obstructs the flow of 'Menstrual Fluid' every month (Pregnancy, Ovarian Tumour); the fluid, thus suppressed, causes a tumour in the iliac region; (d) fasts at the 'Menstrual periods'; (e) fear; (f) dry foods and drinks; (g) taking astringent drugs at menstrual time to stop their flow; (h) unnecessary use of emetics; (i) diseases of the genital organs, are other causes of *Rakta-Gulma*; *Vayu* is the cause of all tumours (Ch.).

It is also due to eating *Vayu*-deranging foods when the woman is in weak health due to fever, vomiting, dysentery, etc.; drinking cold water when hungry also causes it (Va.).

Venesection gives immunity from these tumours (Su.).

Signs :—It is easily mistaken for pregnancy, and shows all signs of pregnancy; the abdomen does not enlarge, and there are no foetus-like movements (Su.). The tumour is mobile, and is mistaken for pregnancy; there is milk secretion from the breast (extra-uterine pregnancy, Ovarian tumour); lips and nipple-areola become dark; the symptoms of *Rakta-Gulma* and gravid uterui are similar, the difference being that in pregnancy the movements of the foetus

are frequent and are felt through its hands and feet ; the movements of a *Gulma* are infrequent and are felt as a round mass ; it afflicts women only and is accompanied by pain (Ch.). The foetus throbs and moves in every part of its body, and its movement is not accompanied by pain ; but tumour throbs or moves as a whole, and there is pain with it (Ma.).

Symptoms :—There is pain and burning sensation ; there are symptoms also of *Pittaja-Tumour*, e.g. fever, perspiration, indigestion, burning sensation, thirst, bitter taste, and redness of the body (Su.). There is local pain, cough, expectoration, dysentery, vomiting, water-brash, dyspepsia, discomfort, somnolence, lethargy, weakness, pallor, giddiness, retching, longings for abnormal food as in pregnancy, œdema of feet, dilatation of vagina, and foul vaginal discharge (Ch.).

Pathology :—The aggravated Vayu enters the blocked up 'Menstrual Fluid,' and produces (a) symptoms of *Vata-Gulma* ; or (b) since Blood is formed from *Pitta*, there are symptoms of *Pitta-Gulma* ; there is thus pain, burning, rigidity, dysentery, thirst, fever, etc. ; in addition foul blood accumulates in the uterus ; there is severe pain, and foul vaginal discharge ; there is throbbing in the vagina and pricking sensation (Va.).

General Treatment :—Treatment should commence after the lapse of the natural period of gestation and is the same as for *Pittaja-Gulma* (Su). Give oleaginous remedies, diaphoretics, light purgatives, enemas ; and food of sweet, sour, and saline taste ; treat first internally and externally with oleaginous remedies ; then subject her to fomentations ; and then give oily purgatives ; a tumour due to obstructed 'Menstrual Fluid' by *Vayu* may disappear on the commencement of a monthly period after treatment with fomentations, sun's rays, excessive exercise, grief, disease, and heat-generating foods (Ch.). Harita, however, definitely interdicts the giving of any stomachic medicines, medicines containing *Ferula asafœtida* gum, massage of the loins, fomentations and diaphoretics, and jumping exercises (Ha.).

The tumor should never be treated until at least 10 months are passed (Ch.).

(1) Give a draught of and rub with ghee cooked with drugs of 'Kakolyadi' group of plants ; (2) purge with compounds of drugs of the 'sweet' group and of the 'Cassia Pistula' group ; (3) give Niruha enema (Su.) ; (4) give honey or ghee mixed with the decoction of

Symplocos racemosa, *Terminalia Arjuna*, *Acacia Catechu*, *Piper longum*, *Rubia cordifolia*, and *Rumex vesicarius*; (5) give milk with 'Sauvarchala' salt, but no meat diet (Ha.). If the menses have stopped, (6) give decoction of *Sesamum indicum* seeds, with ghee, treacles, and powders of *Piper longum*, *P. nigrum*, ginger and *Clerodendron serratum* root; (7) give decoction of *Sesamum indicum* seeds with powders of *Clerodendron serratum* root, *Piper nigrum* fruit, *Pongamia glabra* bark, *Ficus religiosa* root, *Cedrus Deodara* wood; this cures the pains also (Va.). In order to induce a Blood-discharge that is absent—(8) Give drugs of heat-making potency like drugs of 'Piper longum' group; and (9) treat as for Menorrhagia (*Asrigadara*); (10) give ghee cooked with paste of drugs of the 'Kakoli' group, and decoction of 'Trinapancha-mula'; (11) give paste of drugs of the 'Kakoli' group and 'Ficus bengalensis' group; (12) or paste of drugs of 'Nymphaea lotus' group and of 'Kakoli' group (Su.).

To soften the hardness of the tumour and to burst it.—(1) Give one part of alkali from *Butea frondosa*, two parts each of oil and ghee, cooked with 8 parts of water; if it does not burst, give stimulants to promote menstrual flow; (2) insert in the vagina a paste of fried *Sesamum indicum* seeds, and alkali or juice of *Euphorbia neriifolia*; (3) insert a bolus of treacle, top layer of fermenting wine, and alkali from barley shoots (Va.).

Special Treatment for disintegration of Blood in the tumour.—(4) Give internally ghee and oil cooked with alkali of *Butea frondosa* wood, for sufficient number of days to soften the tumour (Ch.); (5) give vaginal douche of *Piper longum*, ghee (Su.).

If this fails to burst the Tumour, give local treatment to stimulate the discharge from the vagina.—(6) insert in the vagina powder of gingelly; (7) or a piece of meat mixed with alkali; (8) or meat soaked in the milk of *Euphorbia neriifolia*; (9) or a piece of fish-meat that is bitter, and treated as above; (10) or a cotton-swab well-soaked in boar's or fish's bile; (11) or a cotton-swab soaked in honey and decoctions of drugs with emetic and purgative properties; (12) give suppositories of *Sesamum* seeds mixed with alkalis and jaggery; (13) give in honey and ghee alkalis used in the treatment of hæmatemesis; (14) garlic, strong wine, and fish; (15) give vaginal douche of decoction of the 'Ten Roots,' milk, cow's urine, and alkalis (Ch.).

OPERATIVE GYNÆCOLOGY :—

(1) *Uterus and Vagina* :—Manipulations to reduce retroflexion, retroversion, inversion, and prolapse of the uterus, and prolapse of the vagina have already been described.

(2) *Tumours* :—If by medical means, there is no flow of blood from an abdominal blood- tumour, then burst it (Va.). Incision into the tumour is the only remedy if it has already been rendered soft and pliant (Ch.). Such an incision should be done after the 10th month (Sha.). The older the tumour the easier it is to cure ; Jejjata says that if the tumour is incised earlier, it harms the uterus ; from the 11th month onward incision does not cause any harm (Ma.).

The patient should be made to lie down, and casting some burning leaf-blades of *Saccharum ciliare*, and *Poa cynosuroides* into a special earthen jar, the mouth of the jar should be placed on the tumour ; the pot will draw up the tumour and localize it ; remove the pot, cover the tumour with a piece of cloth and incise the tumour with suitable instruments ; massage the tumour well with *Vimarga*, *Ajapada*, or *Adarsha* instruments taking care to see that the intestines and the heart are not touched in the process ; if the tumour is seen to have swerved from its site, the surgeon should try to grasp it, and press it with his fingers (Ch.).

When blood begins to flow from the vagina (1) give rice with meat juice ; (2) massage the body with ghee and oil ; (3) give fresh wine to drink. If there is too much of blood discharge, (4) give the treatment for hæmorrhagic diathesis (*Rakta-Pitta*) ; (5) if *Vayu* is aggravated give remedies as for *Vata Gulma* ; (6) anoint the patient with ghee and oil ; give meat of partridge and fowl, wines, and barley gruels ; then give ghee, alone or cooked with drugs of *Jivaniya* group ; (7) if the discharge is copious, give oil enema medicated with bitter group of drugs (Ch.).

OBSTETRICS.

Anatomy :

I. *The Pelvis* and II. *The Uterus*—have already been described in the Gynæcology Section.

III. *The Breast.*—

The Breasts.—The two breasts are organs peculiar to women and have a cavity inside to hold milk. There are two *Outlets* (Nipples) to the breasts (Su.).

The distance between the tips of the two nipples of the breast is twelve fingers. Ten muscles (*Peshi*), not found in the males, are

in the two breasts of the female (five in each breast); they grow during puberty (Su.).

Two channels (*Dhamani*) are attached to the breast of a woman to carry milk of her breasts; (similar *Dhamanis* in the breast of a male convey his 'Seminal Fluid') (Su.).

There are two veins in each of the muscles called *Stana-Rohita* (Su.).

Two fingers above the breasts are two Vital Points (Marmas) in the muscle called *Stana-Rohita*; two fingers below the breasts are two more Vital Points called *Stana-Mula* (Va.).

PHYSIOLOGY :—

The Physiology of the *Generative Organs, Puberty and Menstruation* have been described in Gynæcology Section.

The Breast.—

If the Vital Points above the Breasts are cut there is hæmorrhage in the intestines; if the Vita Points below the breasts are cut, *Kapha* accumulates in the intestine, and the person dies (Va.).

PHYSIOLOGY OF THE OVUM :—

I. Ovulation and Fertilization.

Ovulation Period (*Ritu*) is the time favourable for conception (Su.).

The 'Menstrual Fluid' flows for three days, thereafter the mouth of the uterus (cervix) remains open from 1st to 12th day of the menses; twelve nights is, thus, the period favourable for conception; first three nights and the 11th after the commencement of the menses should be rejected as inauspicious for conception (Va.). The period of conception is 16 nights (Ch.). Some consider it to be a month; some hold that conception may occur at all times (Ma.). Harita considers that the 'Menstrual Fluid' flows for seven nights; this is therefore the menses period; after that, the woman is fit for sexual intercourse; the favourable period is upto 14 days after the commencement (Harita). The conception period is twelve days after the first three days of flow (Da.) Sixteen days is the period of conception (Ha. & Videha).

'Menstrual Fluid' that is vitiated by *Vayu, Pitta, Kapha, and Rakta* Humour is unfit for fecundation (Su.).

A sexual act on the 1st day of the menses shortens one's life, and the child dies immediately after birth; an act on the 2nd day

results as above, or the child dies within 10 days; an act on the third day makes the child deformed and short-lived; an act on the 4th day makes the child long-lived, healthy, and well-developed; sexual intercourse during the menses is not fruitful because the 'Semen' is carried away with the current; hence both husband and wife should forswear each other's company (Su.). After the twelve days of conception period, the husband should visit next month (Su.); otherwise if there is conception, an abortion may come on (Da.).

II. Development.

Development of the fertilized ovum is described in the Section on Embryology immediately after the Humoral Theory to facilitate a reference to the technical terms employed.

III. Sex

During pregnancy, sexes of the foetus are first seen differentiated in the 2nd month; a lump-like appearance indicates a male; an elongated shape, a female; and a tumour-like shape, a hermaphrodite (Su.).

Theories.—Conception during even days of catamenia causes a male child, while on odd days a female child results; Videha and Bhoja say that 'Menstrual Fluid' flows less on even days hence the son, it is more on odd days; hence the daughter; conception occurring on the 4th, 6th, 8th, 10th and 12th day results in a male child; while that on the 5th, 7th, 9th and 11th day results in a female child; 13th and other nights are condemned; conception can occur only during the 4th to the 16th day (Su.).

Determination of the Fœtal Sex in the Enciente:—Birth of a male child is indicated (1) if milk is detected in right breast, (2) if she lifts her right leg at the time of walking, (3) if the right eye looks larger, (4) if she evinces a longing for things with a masculine name, (5) if she dreams of receiving flowers of *Nymphaea lotus*, *Nelumbian speciosum*, and *Mangifera indica*, or flowers of any masculine denomination, or (6) if her face becomes brighter; contraries indicate a female child (Su.).

If the sides become raised and the forepart is found to bulge out, a sexless child results; if the middle part of the abdomen is sunk, or divided in the middle like a leather bag, the result is twins

(Su.). If the foetus lies on the right side facing the back, with hands folded near the forehead, it is a *Male*; if on the left, it is a *Female*; if in the centre a *Hermaphrodite* (V. Va.).

Desire for the company of females, bulging of the foetus on the right side of the abdomen, manly temper and actions indicate a *male child*; reverse, a *female child*; mixture of both indicates a *hermaphrodite*. If the child is to be a female, there is absence of manliness, there is cowardice, want of grace, slow intelligence, unsteadiness of purpose, lower part of body heavier than the upper, loose figure, relaxed feeling in the pelvic parts, softness, and more blood in the uterus; the indications are reverse of this in the case of a male child, and are mixed in the case of a sexless child (Ch.).

Therapeutics :—Vagbhata says that sex is not differentiated for one month; after that period, commence treatment for the sex of the child desired; (1) drink the paste of *Achyranthes aspera*, *Barleria Prionitis*, 'Jivaka', and 'Rishabhaka', to obtain a male child; (2) grind in milk the root of *Solanum xanthocarpum* and use as errhine in right nostril for getting a son and in left nostril for a daughter; (3) grind in milk the root of *Ipomoea sepiaria*, sprouts of *Ficus bengalensis* and drink through the nose or mouth for a son; (4) use drugs of the 'Jivaniya' group internally and externally for a son (Va.). (5). If a male child is desired, pour 3 to 4 drops of the juice of any of the following plants mixed with milk into the right nostril of the woman :—*Ipomoea sepiaria*, *Sida carpinifolia*, and *Abutilon indicum* (Su.).

PHYSIOLOGY OF PREGNANCY:—

I. Changes in the Maternal Organism.

Causes of Signs of Pregnancy :—The Foetus or impregnated matter serves to make the characteristic features of pregnancy patent; breast-milk brings about an enlargement of the mammae and maintains the life of the child (Su.).

The growth of the foetus presses *Vayu* to the mother's heart and produces itching, burning sensation of hands and feet, and *linea albicans* on the breast and abdomen (Va.). Increase in Lymph (*Rasa*) causes nausea, water-brash, and salivation; the humours are deranged and aggravated owing to pregnancy; they rush up to the mouth, and after covering the whole of it come out with great force as a 'vomit'; this is accompanied by aching pain in the limbs (Su.).

The orifices of the channels of 'Menstrual Fluid' of an enciente are obstructed by the foetus; hence there is no show of the menses;

the menstrual blood thus obstructed ascends upwards; part of it accumulates and forms the placenta, while the rest ascends higher up and reaches the breasts; this makes the breasts full and plump (Su.).

Early Signs and Symptoms of Pregnancy.—Sensation of heaviness of the body, throbbing in the hypogastrium, palpitation, somnolence, thirst, tired feeling, and horripilation (Va.). A sense of fatigue and physical langour, suppression of flow of menses, and throbbing in the organ (Va.). Horripilation, heart troubles, fullness in abdomen (Ch.); and stoppage of discharge (Gayadas).

Later Signs and Symptoms of Pregnancy.—A black areola round the nipples of the mammæ, the rising appearance of a row of hair as far as the umbilicus, contraction of eye-lids, nausea, water-brash, sudden vomitings, and a sense of lassitude (Su.). Stoppage of menses, hatred of food, loss of taste, desire for sour things, indifference to good and bad things, milk in the breast, lips and breast very dark, œdema of legs and feet, and contraction of vagina; these are the symptoms upto 3rd month of pregnancy (Ch.). There is loss of weight, heaviness of the side where the fœtus is, loss of consciousness, bad taste, and meaningless longings (Va.).

In the 4th month, the enciente feels more heavy, because the fœtus is more steady.

In the 5th month, she becomes lean, because the muscle and blood of the fœtus increase in a greater ratio (Ch.).

In the 6th month, the enciente looks pale and feels weak because the fœtus increases in strength and complexion.

In the 7th month, she is in all respects in a feeble condition as the development of the fœtus is complete (Ch.).

In the 8th month, since the development of the fœtus is complete, the fœtus and the enciente alternately draw the Vital Energy (*Ojas*) from each other; they thus become alternately feeble; *Ojas* not being steady, the life of the fœtus is in danger, and if it is delivered then, it dies; there is even danger to encient's life; this month is thus a crucial one to both (Ch.).

From the 9th to the end of the 10th month is the proper time for delivery; after this period the delivery should be considered abnormal; Gayadas considers twelve months as the proper period; after the 10th month, the abdomen is the seat of the fœtus (Ch.).

Sushruta considers ten months as the proper period of pregnancy which may extend to 11 or 12 months according to Humours deranged (Su.).

(To be continued).

Reports of Cases.

KAVIRAJ M. K. MUKHERJEE, B. A.,

AYURVEDA-SHASTRI, CALCUTTA.

—:0:—

He is by name Nani Lal Ghosh. He was on the wrong side of his fortieth summer at the time when he was counselled Ayurvedic treatment as the last resource and came to our Hospital appealing in all tears for a kind asylum. The piteous spectacle of the afflicted fellow would have softened the stoniest heart. Yet there are practical difficulties in the way of taking in incurables. He came prostrate, a bag of bones. He could not sit upon bed even bolstered up or otherwise assisted. The neck was stiff. In a word, the whole system was overpowered by an acute paralytic stroke. He had undergone a long treatment at the hands of Allopaths and was now fresh from a protracted residence in the Calcutta Medical College Hospital, where his case was determined as what was called cerebro-spinal cancer. For that was the name he showed written on a card. He had been given over there and was cruelly asked to hasten away from Calcutta with some waters of the holy Ganges, to be with his dear and near ones. And so he had almost decided, when for a last attempt the half-hearted fellow was referred to us. I should make no secret of our reading of the case, which manifestly appeared as a non-acceptable one. But what with the calls of humanity in the human heart and what with our curiosity for experimenting with chronic and complicated cases our ultimate decision was in his favour and we raised him to the 3rd storey on an invalid chair and to that so very cautiously. He was treated for long 4 months with all sorts of costly remedies and diet. There was a break for a fortnight so far as our direct supervision was concerned. For according to our general rule, no patient is allowed more than two months residence at a stretch in the Hospital. So he was re-admitted after a fortnight on the expiry of the first 3rd month when he was usually discharged. The

period of 4 months over, we advised him to go home, assuring him of a good longevity. But he was to prolong his treatment to get completely cured. He now walked erect, even without staff. He could turn his neck to the bed sides. What did we treat him was for Acute Paralysis. He came here from his village home twice to offer his grateful acknowledgments and even to our wonder we found how miraculously he had improved in every wise. The immense potentialities of Ayurveda are herein evident. The day is not distant when such cases will be an unrefutable challenge to all sister sciences of medicine, which are waiting to be illuminated by a hoary and holy fire to be kindled by the resplendent Medical Lore of the Orient.

The curious reader of this information may know that the following medicines were tried upon the case with satisfactory result.

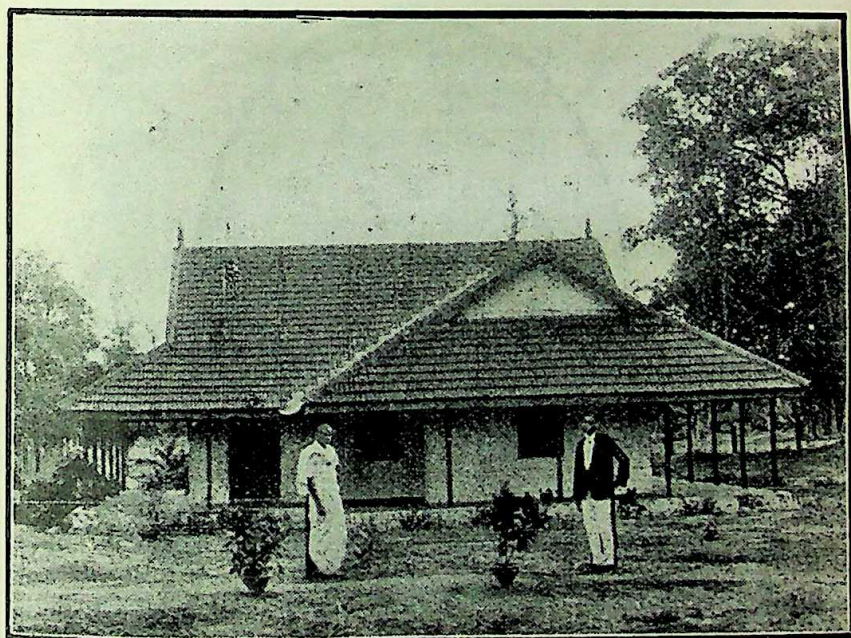
Brihat Chhagaladya Ghreeta, Bazigandhadi Pachan, Baisnava Churna mixed with Bazrakhar, Rasharaj Rasha, Mahamas Taila with Mazza Snehas, Brihat Saindhyabadya Taila, swedh of Saindhab and Maskalai, Pralepa (Kala kolathwadi), etc.

Reports of Societies etc.

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SEVENTH ANNUAL REPORT OF THE LOCAL FUND FREE AYURVEDIC DISPENSARY, KOTTAPATAM (Guntur Dt.), *For the Year ending with 31st March 1933.*

Seventh Annual Report :—I am very glad to present the Seventh Annual Report to day to you all.



Kottapatam Local Fund Free Ayurvedic Dispensary.

History of the institution :—This dispensary was established in 17-3-1887 as Allopathic dispensary some 37 years back and

was converted into an Ayurvedic Dispensary on 1-10-24 and is running on excellent lines.

Building :—The dispensary building is situated on the 1st line beach of the village with extensive fenced compound where in a delightful garden is reared with indigenous medicinal herbs which acts as a sort of solace and pleasure to patients suffering from all kinds of ailments.

Furniture and utensils :—These have been supplied by the Board.

In-patient Wards :—The necessity of having in-patient ward has been a long felt want. Neither the management nor private benefactors conceded to this request.

Management :—The Ongole Tq. Board is maintaining the dispensary with feminine partiality in addition to the Allopathic one at Addanki and three rural dispensaries in the Taluk.

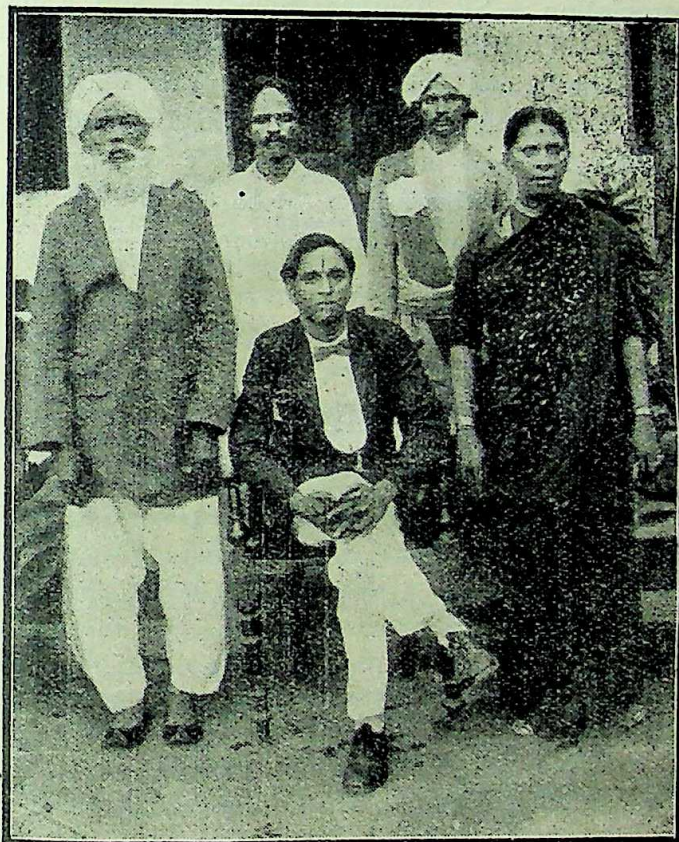


*Dr. N. Kasava-charlu, Medical Officer, Kattapattam
L. F. Free Ayurvedic Dispensary.*

Due to universal financial depression the Board is not able to accede to the request of furnishing the dispensary with two beds

for inpatients. A perusal of statement No. II appended to, discloses the fact that minor surgical operations also are undertaken.

The relative advantages of Ayurveda :—The Eastern System of medicine does not involve as much expenditure as the Western system of medicine. It is within the easy reach of one and all. The Government, having realised the fact that the system suits, the people at large is now treating this with equal affection unlike in the past. It is gratifying to note that two F. I. M. degree holders will be appointed for research work and two for Inspecting the dispensaries of Indian Medicine as Inspecting medical officers.



Staff of Kottapatam L. F. Free Ayurvedic Dispensary.

Situation of the village :—The village is ten miles to the nearest Ry. station i.e., Ongole, on the east coast. Houses are available at cheap rate and all comforts can be had. There is a

nice Road leading to the Sea from Ongole and Motor cars and Buses ply every day and many resort there during every summer.

Expenditure :—No money is taken from the patients who come for treatment, as this is a free dispensary. The cost of Ayurvedic treatment is nothing, i.e., very much less than that of allopathic treatment and a perusal of statement No. I will disclose the fact. The amount of money spent per patient comes to Rs. 0-0-3'2 pies as all medicinal drugs with the exception of those not available are bought locally and medicines prepared on Sastric lines. I request the valuable readers and admirers of the indigenous system of medicine to espouse its cause and make it universally loved.

Appreciation :—Sjt. Ayurveda Bhushana, Nori Rama Sastry Garu A. K. A. C., Sreeman Kaviraja Prathibathi Bhayankara Kristnama Charlu, and Bhishagratna Dr. A. Lakshmipathi Garu, B.A., M.B., C.M., the Principals of three Ayurvedic Colleges in Andhra Desa, have sent in their appreciative remarks as regards the earnestness and enthusiasm of the Doctor and the locality as a sanitorium of the District during summer.

Medical News & Notes

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MEDICAL EXHIBITION AT BOMBAY.

Under the joint auspices of the tenth session of All-India Medical Conference and the twenty-sixth session of the All-India Medical Licentiates' Conference, a medical and sanitary exhibition will be held during the Christmas week at Hospital Avenue, Parel, Bombay. The exhibition affords splendid opportunities for Indian commercial men to give publicity for their products and to push on their business among the medical men from all over India who gather together for the conferences. Further particulars regarding the exhibition can be had from the joint honorary secretaries of the joint exhibition committee of the two conferences at 127 Girgaum Road, Bombay 4.

DISPENSARY PRACTICE IN GERMANY.

The Prussian Ministry of the Interior has recently ordered the cancellation of permits to conduct "house pharmacies". Hitherto physicians in remote areas have been permitted, after a special examination, to conduct a house pharmacy in which they themselves were allowed to prepare the necessary medicines. The improved transportation facilities have obviated the running of house pharmacies by physicians, but emergency remedies can be always carried by them. House pharmacies act as rivals to the regular pharmacies and prevent young physicians from settling in rural areas, as the older physicians who run house pharmacies put them at a disadvantage. Under the new rule, the need for house pharmacies will be investigated and the ordinary pharmacies of a given district will be required to arrange for supplying the population with a reliable drug service. It is a far cry from Prussia to India, where even senior physicians in state employ run pharmacies of their own under varying degrees and gradations of camouflage.

THE INDIAN INSTITUTE FOR MEDICAL RESEARCH.

News runs in Calcutta that it is proposed to establish an Indian Institute for Medical Research, where investigations in medical sciences could be carried out and the problems bearing on the promotion of national health could be intensively studied. An appeal has been issued by Dr. Rabindranath Tagore, Pandit M. M. Malaviya, Sir P. C. Ray, Sir C. V. Raman, Sir Nilratan Sarcar and several others, for contri-

butions in the shape of money for running the Institute. The appeal states that very little work has been done in the country outside the government institutions, where national talents do not find full and free play and where the work is not always intimately connected with the vital problems of national health, nor is the number of such institutes adequate to meet the needs of the country. A truly Indian research institute, Indian in every respect, is imperative, and the objects thereof will be to carry on research in the medical sciences, to train a band of research workers, to apply the knowledge obtained to clinical practice and preventive medicine, and to disseminate the knowledge of hygiene among the masses, making its services available to them either free or at a low cost. The Institute will start with six departments, namely, bacteriology and pathology, tuberculosis, biochemistry and nutrition, protozoology, experimental pharmacology and indigenous drugs inquiry, and diagnostic laboratory and clinical work (with which the propaganda and preventive service will be incorporated). More sections will be added as soon as sufficient funds are available. The diagnostic department will be in direct touch with the needs of the people and will help institution, local bodies and medical men with the diagnosis of communicable diseases and distribution of biological products, either free or at a nominal cost. Each department will be under a Director, assisted by a suitable staff. The Institute will also act as a consultative body for the determination of the standard, purity and potency of sera, vaccines, and other biological and pharmaceutical products. Post-graduate students and research workers, both voluntary and stipendiary, will be trained and the results of researches will be published periodically in the form of Transactions of the Institute. The Institute proposes to cover its expenses partly by manufacturing standardised biological and other products and partly by endowments. It has been calculated that the initial expenses for starting the Institute will be Rs. 125000 for fittings, equipments, and first year's expenses, and an annual recurring expenditure of Rs. 110000. Donors may help the Institute by endowing a department, creating special chairs for special investigations, creating scholarships for junior workers, or by donations and endowments for the general expenses of the Institute. The first governing body, with administrative charge of the Institute consists of Sir Nilratan Sircar, Mr. A. R. Dalal, Dr. T. S. Tirumurti of Vizagapatam, Dr. V. R. Khanolkar of Bombay, Dr. S. Subba Rao of Mysore, Dr. B. N. Vyas of Lucknow, Drs. K. S. Ray, A. C. Ukil, H. Ghosh, N. Bannerjee and B. C. Guha of Calcutta. All contributions will be received on behalf of the governing body by Mr. A. R. Dalal, i. c. s. (Retd.) 100 Clive Street, Calcutta. All correspondence, not dealing with contributions, should be addressed to the Secretary, Indian Institute for Medical Research, 44 New Theatre Road, Calcutta. The Gurukul Kangri Collection, Haridwar.

THE INDIAN CENSUS REPORT.

In the course of his report embodying the census of the year 1931, Mr. J. H. Hutton, the Census Commissioner, notes that the treatment of sociological features of the population of India is much prejudiced by the absence of any general or compulsory registration of births, deaths, or marriages. The birth-rate in India was everywhere much higher than in Europe, and lower among Hindus than in other communities ; but the high birth-rate was largely discounted by the high death-rate, particularly among infants and among women at child-birth. The report says that Madras beat the record in India for the very satisfactory registration of births and deaths, and a tendency for men to marry late was noticed. The total population of India in 1931 was 353 millions, an increase of 33 millions over the previous census. The increase of [population, which is greater than any other country in the world, was, however, a cause for alarm rather than satisfaction, as it involved the question of food production. The total urban population of the country was only 11 per cent of the whole population.

BIRTH CONTROL PROPAGANDA.

The marked increase of population has set the intelligentsia of the country thinking about the feasibility or otherwise of the practice of birth control. Madras has taken the lead, and the government propose to open birth control clinics in the Government Hospital for Women and Children, Egmore, and the Government Victoria Hospital, Triplicane, in the first instance, where contraceptives will be stocked and a lady doctor appointed to impart advice and instruction to those who may seek it. Later on it is proposed to establish such clinics in selected district hospitals. Other provinces also have taken the cue, and women's organisations are generally well disposed to the idea of the adoption of birth control methods. Of course, there are opponents to the scheme all over the country, particularly among the Catholics. While it is but natural that people's feelings and sentiments have to be respected, there is no denying the fact that birth control is a god-send when pregnancy is utterly contra-indicated on medical grounds.

THE INJURIOUS EFFECTS OF COSMETICS.

Writing in *Médisinische Klinik*, Dr. R. L. Mayer of Berlin, points out that it is generally believed that the mechanical factor in powdering and painting namely, the clogging of the excretory duct of the sweat glands, inhibits the normal secretory function of the skin and thus causes

it to become flabby and grayish. It is probable that this factor has a certain influence, especially when the perspiration is profuse, as is frequently the case in actors; but whether this clogging of the pores is also of significance in the customary daily use has not been proved. However, injurious effects do result if the powders or paints contain poisonous ingredients, such as white lead. In some countries the use of white lead has not been legally prohibited as yet, and in these countries the injurious effects of cosmetics are most common, not only on the skin but occasionally manifested as symptoms of severe poisoning like those noted in lead poisoning; in many instances the white lead in the cosmetics has been found to be the cause. In Japan where women use powders containing mostly white lead it has been noted that breast-fed infants frequently develop meningitis and the lead containing powders have been considered to be the cause of this. Efforts are now being made in many countries to prohibit the use of white lead in the preparation of cosmetics. But even if the cosmetics do not contain poisonous substances, local symptoms of irritation may develop. Some persons may have a hypersusceptibility toward certain ingredients, most frequently toward the dye or the scent. However these cases are extremely rare. It is usually difficult to detect the offensive substance because the perfumes used for scenting the powders sometimes contain from fifteen to twenty-five different substances. A person who is hypersensitive to a certain powder should either not use any powder or should try other brands. In cases of inflammation of the mucous membrane of the lips resulting from the use of a lip stick, it has been found that either casin or rhodamine was the cause. In discussing hair dyes, the author points out that those of vegetable origin, especially henna, are harmless. However the oxidation product of synthetically produced amines have likewise been used for hair dyeing in recent years and in some persons they cause complications. These substances are used also for dyeing furs and occasionally inflammations of the skin develop after contact with such furs. Metallic dyes are sometimes combined either with organic dyes or with henna, and the author thinks it advisable, in order to prevent serious complications, to test the dye first on small portion of the hair. He also advises against bleaching the hair with hydrogen dioxide.

Late Mr. VITHALBHAI JAVERJI PATEL.

It is with a heart surfeit with sorrow that we announce the death of Vithalbhaji Patel, one of the few faithful sons of mother India. The other day India lost Deshapriya Jotindra Mohon and scarcely the country could recover from the shock, she lost a great leader in the person of Mr. Vithalbhaji Patel. That the fate of unfortunate India is doomed, at least for some time to come, is clearly understandable from these melancholy events happening one after the other in quick succession and at critical moments.

Vithalbhaji Patel was born at a small village of Gujrat in a respectable zemidar family. His father was Javerbhaji Patel, who gave both Vithalbhaji and Ballabhbhai a very liberal education and both the Patel brothers were sent to England to qualify themselves for the Bar. It is of course known to all that both the brothers were successful barristers-at-law. Mr. Vithalbhaji began his career as an advocate at the Ahmedabad Bar. He had to pass through tremendous odds before he rose up to eminence. That he had a profound knowledge of the intricacies of law is acknowledged on all hands.

His was a life dedicated to the cause of the people. While at Ahmedabad, he came in touch with the workings of the Bombay Corporation and was ultimately elected its President during 1924-25. He was the Chairman of the Reception Committee of the Special Congress that sat at Bombay in 1918 to discuss the proposals of the Montague-Chelmsford Reforms. He was one of the Congress delegates that sailed to England in 1919 in order to protest against the new reforms. As a member of the Indian National Congress, he joined the Non-Co-operation movement introduced by Mahatma Gandhi, but later on he joined the Swaraj Party of late Deshabandhu Das and was returned to the Legislative Assembly as a Swarajist

member from Bombay in 1924. He was then elected the Deputy Leader of the party in the Assembly. In 1925, he was elected President of the Assembly by majority of votes. But although he was elected with the strength of his party votes, yet he performed his duties without any bias or prejudice and this impartial discharge of duty on his part led him to this position again in 1927 without any contest. At this time, he went to England to study the workings of the British Parliament. He was so pious and true to the cause of his country that he spent every farthing of his salary for the benefit of his country. The efficiency, courage and presence of mind shown by him in the discharge of his duty as President of the Assembly will remain ever prominent in the history of the Indian Legislative Assembly. His adjourning the Assembly *sine die* with the remark "The House loses its representative character" on one occasion when the swarajists left the Assembly in a body is an incident without a parallel in the history of any Council or Assembly of the present-day India. Though born in a dependent country, yet he refused to be brow-beaten by any body, official or otherwise. He never learnt to bow down his head, whatever might have been the odds against him, and this quality in him was instrumental in humbling down his enemies, however great they might have been in rank or position. He had, indeed, the makings of a Macdonald or a Roosevelt but alas he was born in India.

His was an adamant character and yet he was tender like a soft flower. When in 1930, thousands of Congress workers resolved to sacrifice their all at the altar of civil disobedience, Vithalbhai resigned his service as President of the Legislative Assembly and joined this movement. He was arrested and sentenced to six months' imprisonment at Delhi in August 1930 as a member of the Congress Working Committee, which was then declared illegal. At this time he said jokingly that by the award

of imprisonment he got his certificate of honour as also a pension.

His health, however, deteriorated when he came out of prison and he sailed to Europe to recoup his health in February 1931. He travelled the world over in order to create international sympathy for India's emancipation even with his shattered health. The honour he received in America is unique for an Indian hereto-fore. But the mental strain as also physical labour were too much for the frail body and at last it gave way and the great politician, the ablest organiser and a beloved son of poor India breathed his last at Vienna on the 22nd. of October last, far away from the land he loved and the people for whom he worked. Even at death bed his last words were "Even before I die, I pray whole-heartedly for India's freedom."

May his soul rest in peace in Heaven and may he bless his unfortunate countrymen so that they may look up to his ideal and lead India to the paths of glory and emancipation.

H. N. C.

OUTLINES OF AYURVEDA

BY

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(MADRAS).

To deal in detail with each and every topic in Ayurveda is not the intention of the present essay as many of them have appeared from time to time in the pages of this as well as of other journals receiving full justice, but to touch such of them, apart from the literary aspect of our medical science, as are necessary for a practitioner who had already been conversant with the same. For purposes of convenience and in accordance with the topics treated, the essay is divided into five parts, viz :—(1) Sutra Khandam, (2) Oushadhi Khandam, (3) Roga Khandam, (4) Nidana Khandam and (5) Chikitsa Khandam.

SUTRA KHANDAM.

This division as its name signifies treats of the certain fundamental principles of the Science of Ayurveda in general.

This system of medicine was endowed by its originators *The Title* } with the title of Ayurveda.

The term Ayurveda is the resultant of the combination of the *Its Scope* } two words *Ayu* and *veda* which mean the knowledge of Life. In particular, this term restricts its application to the Hindu Healing Art only but in general, it embraces in itself all the different kinds of medical sciences of the different nationalities and countries of the world, as the chief aim of all medical sciences is the same, viz. removal of ill-health from the unhealthy and thus to enhance the period of life.

By tradition it is imparted by Brahma, the supreme creator of *Its origin* } the universe, down to humanity through the celestials like Indra, etc. Here and there in fragments, it is found in the vedas, scattered, chiefly in Atharva Veda and Rig Veda but is said to be as eternal as no body knows its definite origin, i.e. when or with whom

it began. It was studied by Brahman's for doing good to all beings, by Kshatriyas for self-protection ; by Vaisyas for trade and in general by all for the acquisition of *Purusharthas* (Religious merit, wealth, pleasure and emancipation).

The whole science was primarily divided into eight branches or *Its Divisions* } Ashtangas as they are termed, each dealing with a special group of diseases with reference to their nature etc (as in the present day Curriculum of Medical education).

1. *Kaya Chikitsa*, Treatment of general diseases.
2. *Bala Chikitsa* (Koumarabhritya), Diseases of infants and their treatment. Ailments of pregnancy and the puerperal state are of course included in this.
3. *Graha Chikitsa* (Bhuta Vidya), this deals with the diseases and their treatment caused by evil spirits and demons.
4. *Urthwanga* (Salakya) Chikitsa This treats of the diseases and their treatment that affect the parts above the clavicles, i. e. of eyes, ears, nose, throat, etc.
5. *Salya Chikitsa* This describes the treatment of diseases by surgical aids.
6. *Visha Chikitsa* (Agada). This is toxicology associated with the cure of infections conveyed through air, water, etc.
7. *Rasayana Chikitsa*. This treats of remedial measures that ward off decrepitude and ill health and promote longevity.
8. *Vajeeekarana Chikitsa*. This embraces the aphrodisiac medicines that regulate and maintain intact the reproductive activities of an individual, in spite of his excessive trespass into the sexual domain.

It is exceedingly important to understand the true *Its Theories* } principles which form the basis of any science before the system can be attempted to be understood. Apart from many subsidiary ones, two are the chief theories which hold the science called *The Panchbhautic* (Elemental) and *The Tri Dosha* (Humoural), which are mutually complimentary to each other forming nuclei, around which the whole web of Ayurveda is woven. This is based upon the belief that every existing matter in the universe *The Pancha* } is composed of the five bhutas (the primary elements) viz, Prithvi (Earthy); Ap (watery), Teja (Firey), Vayu (airy) and Akash (Ethereal). It is held that every

bhuta exists in two states, (a) the Sukshma (Subtle) and (b) the Sthula (gross). The gross condition of every subtle element is believed to be produced by the combination of all the five subtle bhutas in different proportions and this process by which the gross matter is created from the subtle matter is called by the name of *Panchikarana*. Every sthula bhuta receives its name, qualities, functions etc. from that particular sukshma bhuta which is predominating in the combined mass, as in Prithvi mahabhuta (Sthula), the number of the Prithvi Sukshma bhuttas (Earthy subtle elements) are dominant over the remaining four subtle elements and in a like manner the remaining four sthula bhutas are originated. These five elements are said to possess the three gunas, *Satwa*, *Rajas* and *Tamas* which correspond to respectively the Vayu, Pitta and Kapha of the medical literature which are held by some of the recent scientists as different kinds of force manifested by the coalescence of the elements in different proportions based upon a chemico-physical classification, representing the three forms of energy, viz regulative, katabolic and anabolic and presided over by Vishnu, Siva and Brahma. These five bhutas stimulate, as forces under which they are presented, the five organs of sense as follow :—nose, the organ of smell ; tongue, the organ of taste ; eye, the organ of sight ; skin, the organ of touch and ear, the organ of sound are stimulated by the five bhutas beginning respectively with Prithvi, though the two energies *Rajas* and *Tamas* are of contradicting nature, they are, by the regulative energy of *Satwa*, kept in a state of equilibrium.

The next to importance is the theory of three doshas upon which
The Tridosha Theory } every normal and abnormal action in the human
 machinery is explained, which enunciates that
 in the organism there reside three principles, rather forces, in a
 manner like the existence of magnetic energy in a load-stone, called
 doshas, viz. Vayu, Pitta and Kapha, which in their subtle state are
 beyond the cognition of senses each of which holding a responsibility
 for the proper conduction of certain functions in the human
 body. Health is said to be their state of equilibrium while ill-
 health as their deranged condition. In composition, these are
 said as *Panchabhautic* as considered by some as matter and the
 last two as chemical forces of energy which are stimulated by the
 nervous energy Vayu.

The existence and the offices of these three principles of Vayu, Pitta and Kapha in the human body have been said to be similar

to the existence and the functions of the great principles of Wind; Sun and Moon in the external universe which are the chief responsible agents for the welfare of the world.

Akash and Vayu are the predominating bhutas.

Vayu } Dryness, lightness, clearness, cold, motion, form-
Attributes. } lessness.

Functions. Chiefly associated with motion.

Gives motion to body (Praspandanam).

Carrys sensations (Udvahanam)

Carrys food down to its chambers (Purnam).

Sorts waste from the digested food material (Vivekam).

Supports the organism (Dharanam).

Seat of occupation. Though Vata pervades the whole body, parts below the umbilicus, i. e. Pelvic, pubic regions etc. are said to be its primary seats of residence.

All the doshas are believed to perform their respective functions differently in accordance with their different places of occupation receiving different names.

Vayu in its different aspects. *Prana Vayu* lies in the head, chest and throat and sends down the food into the stomach.

Udana Vayu. This runs upwards and carries the respective impressions of the sense organs.

Samana Vayu. This circulates in the stomach and intestines and takes part in separating the wastes in the organism. Probably this may take an active part in the mechanisms of exchange of gases and urinary secretion etc. The production of various malas from the dhatus is the result of the natural function of this Vayu.

Vyana Vayu pervades throughout the whole body imparting locomotion.

Apana Vayu occupies the lower portions of the alimentary canal and the pelvic viscera and controls over the retention and evacuation of urine, faeces, semen, menstrual blood, foetus. Vayu (in general) normally gives energy to the body conducting the proper functions of the organs and maintains the equable course of the other principles of the organism and controls the Respiratory mechanism.

In brief, as held by some annotators, the principle of Vayu comprises the whole range of Phenomena that comes under the

control of the central and sympathetic nervous systems of the modern physiology possessing regulative energy.

Naturally it will be in a state of aggravated condition in a cold or windy day, during the closing period of one's life, at the closing hours of day and night and at the closing period of digestion.

It is aggravated by the presence of objects possessing similar qualities as those of itself and by partaking of pungent, astringent, bitter and light substance and indulging in violent exercises causing abnormal symptoms.

It is accumulated in *grishma* and aggravated in *Varsha* and alleviated in *Sarad*. When in a state of reduced condition brought about by practices and food and drink of antagonistic nature it produces certain symptoms indicating the lack of its proper discharge of functions. So also the remaining two. It is the derivative of fire and air.

Pitta Attributes - Heat, keenness, lightness, slight oiliness, scent of raw meat, blue colour in normal condition and yellow in deranged condition with bitter and sour as two-fold tastes.

Functions :—

1. Gives colour to body and blood (Rajakrit)
2. Digests food and governs metabolism (Paktikrit).
3. Vitalises the tissue cells (Ojakrit).
4. Gives and preserves the eye sight (Tejakrit).
5. Originates and regulates the body heat (Ushnakrit).
6. Develops the intellectual faculties (Medhakrit).

Located in the mid region of the body between the umbilicus
Seat of occu- } and the heart and yet permeates the whole organism
pation. } Thorax. Sweat, saliva, blood etc. are said to be
 its secondary places of habitation.

Like its companion Vata, it is also called by five different names according to the different seats it occupies and with reference to its different functions.

Pitta in its different Offices.

1. *Pachaka* is located in the region of Amasaya and Pakvasaya, helps digestion, purges off the excreta and keeps up the temperature in the distant districts of the body.

2. *Ranjaka* imparts the characteristic pigmentation to Rasa transforming it into blood (oxyhaemoglobin). Liver and Spleen are its dwelling places.

3. *Sadhaka* has its seat in the heart and brings about the fruition of one's desires.

4. *Alochaka* is located in the organs of sight and catches the image of an external object on to the retina.

5. *Brajaka* Skin is its place of residence and it illuminates the glow of the natural complexion of the body.

In general, therefore, pitta is chiefly associated with heat production and regulation and is stated by some commentators as the Katabolic energy controlling the Katabolic group of endocrine glands.

Naturally Pitta will be in a state of aggravation in summer, in autumn, in youth, at midday and midnight and during the digestive process. It is aggravated by anger, grief, fastings and by indulgence in heat-making food of pungent acid and taste and light substances etc. Pitta accumulates in the Rainy; is aggravated in *Srat* and is alleviated in Hemanta Season.

Kapha with its Attributes. Water and Earth are the predominating elements in this dhatu. It is white, heavy, oily, slimy and cold. Normally it has a sweet taste which becomes saline in Vipak.

Functions.

1. Lubricates the interior of joints (*Sandhi samsleshanam*)
2. Contributes to the glow of the skin (*Snehanam*).
3. Helps in the organisation of healthy granulation tissue in sores (*Ropanam*).
4. Builds fresh tissues (*Brinhanam*).
5. Contributes to the development of the body (*Puranam*).
6. Gives a pleasant sensation to the body (*Tarpanam*).
7. Imparts strength (*Balakrit*).
8. Gives firmness to the organs (*Sthairyakrit*) and is chiefly associated with coldness.

Like the former two doshas, kapha is also called by five different *Seats of* } names according to the different seats it occupies
occupation } and different functions it discharges in the normal body. It occupies the place above the heart chiefly and many other places as follow and occupies the same seat with Pitta, though with contrary qualities, just in a manner the Sun holding the Moon having the opposite qualities.

Kledakam-Kapha with its different names. It is located in the stomach and supplies its humid essence to other parts of the body.

Avalambaka. } Region of the chest is its residence. Protects the joints of the arms, neck, sternum and facilitates the heart to discharge its functions.

Bodhakam. The throat and the root of the palate are its places of habitation. Moistens the tongue and aids the perception of taste.

It habitates in the head and cools the different organs of sense
Tarpakam.

The various joints of the body are its places of abode.

Shleshmakas the office of which is to keep them firmly united and protect their articulations.

In general, the normal functions of kapha are thermolysis, strength giving and lubrication and protection of articular joints. Some hold that it is the anabolic energy connected with the anabolic group of endocrine glands.

Spontaneously it is aggravated in the morning and evening, in the Spring, just after a meal and in the early boyhood. It is aggravated by sedentary habits and indulgence in food of similar qualities to those of itself, such as are heavy, slimy, sweet etc. Naturally it is accumulated in *Hemanta*, aggravated in *Vasanta* and alleviated in *Greeshma*. The doshas in their aggravated stage produce liking towards articles of contrary nature and in their attenuated condition towards articles of similar nature and qualities. They in their aggravated stage possess their qualities and actions enhanced (but not beyond their strength) and in the attenuated condition lack in their qualities and actions having lost their intensity to a certain degree below their normal measure (but not completely).

A simultaneous derangement of any of the two doshas is called *Samsargam* and } *Samsargam* and of the three doshas is *Sanni-*
Sannipatam. } *patam*.

Six are the stages of vitiation of doshas during which administration of drugs should be resorted to.
The Stages of }
Vitiation of Doshas. } They are by degrees of vitiation as follow.

I. Stage of Accumulation. (सञ्चय)

2. Stage of Aggravation. (प्रकोप)

3. Stage of Expansion. (प्रसार)

4. Stage of Incarceration. (स्थानसंश्लेषः)
5. Stage of Manifestation. (व्याधि)
6. Stage of Maturation.

These will be dealt with once more in the divisions of Chikitsa-khandam.

Broadly speaking and briefly putting and summing up the whole theory of vata, pitta and kapha, the theory signifies that *Vata* is the general regulative agent having the nervous system under its command; *Pitta* is the thermogenetic energy which guides the metabolic activities as heat production, combustion and built, while *Kapha* is thermolytic by virtue of its humid nature.

Upward, downward and transverse are the three courses of direction by which the doshas migrate from place to place in the body. These are termed dhatus in their normal condition by virtue of their supporting the body, and doshas in deranged condition by their inherent property of deranging the other dhatus of the body.

The human body is a constitution of *doshas* (Vayu, Pitta—*Dhatus* and *Malas* } Kapha), *Dhatus* and *Malas*. The dhatus are otherwise called *Dushyas* as they are vitiated by doshas. The dhatus in the body are *Rasa*, *Rakta*, *Mamsa*, *Meda*, *Asti*, *Majja* and *Sukra* and finally *Ojas*, many of which may be classified under the connective tissue group of the elementary tissues. These are in succession said to be derived from one or the other beginning with *Rasa* from the food an individual takes, each exercising certain effects upon the organism. The whole course of such transformation from the first to the last dhatu is believed to occupy a period of one month.

Rasa (charge) has its seat in the heart and flows all over the body contributing to its growth and supports life. It contributes
Functions of } to the formation of blood, the next succeed-
the 7 dhatus } ing dhatu. *Rakta* (Blood) increases the gloss of the body and leads to the formation of the next dhatu, *Mamsa*, and maintains vitality.

Mamsa (Flesh) forms the rotundity of the organs.

Meda (Fat) gives glossiness.

Asti (Bone) supports the body.

Majja (Marrow) fills the cavities of bones and forms the chief source of strength.

Sukra (Semen) gives valour and is the impregnating principle.

Ojas is the vital energy being the quintessence of all the above dhatus and exercises control over the vitality and operative and intellectual organs of the body.

These dushyas, being liable to be vitiated by doshas either abnormally or subnormally, their respective indications are exhibited on such occasions for the detailed description of which space does not permit. An increase or decrease of any of these, either in quantity or in quality, may similarly affect the next immediate dhatu. The Ayurvedic Medical treatises give even the measurements of quantities of these dhatus in a normal body in anjali (handful) measures as Rasa six handfuls; Rakta eight etc. In women, menstrual blood and milk are attributed to another set of dhatus called Upadhatus,

These are metabolic wastes which should be regularly removed *Malas* } in order that the dhatus may not be auto-intoxicated from the poisonous effects these possess, but yet these are indispensably necessary for the preservation of the body.

It is believed that doshas as well as dhatus have *malas* of their *Origination of Malas* } own, probably thrown out in the latter case during their course of transformation from one state to the other as from Rasa to Rakta and from Rakta to Mamsa and so on as follow :—

| | | | |
|----------|-------|-----|---|
| Malas of | Vayu | are | Urine and fæces. |
| " | Pitta | " | Undigested food thrown out of stomach and watery secretions from mouth. |
| " | Kapha | " | All mucous secretions from lungs, throat etc. |
| " | Rasa | " | Mucus. |
| " | Rakta | " | Bile. |
| " | Mamsa | " | Discharges from ear, nose, eyes. |
| " | Meda | " | Sweat. |
| " | Asti | " | Nail and hairs. |
| " | Majja | " | Oleagenous portion of skin, eyes etc. |

But Semen casts off no *Malas*,

The next equally important, chiefly from the standpoint of treatment which enunciates that soil is more important than the seed, is the theory of the *Prakrities* which comprises the Pathology of individual constitutions.

tutions. In every individual, it is held that a dosha or doshas naturally predominate from the time of his birth determined by the preponderance either of one or two or three doshas at the time of the actual union of the two parental principles, i. e. at the time of the fertilisation of the ovum.

With reference to such predominating doshas, either singly or *Varieties of* } in two or in the three, seven are the temperaments *Prakrities.* } described, viz. *Vataja*, *Pittaja*, *Kaphaja*, *Vata-Kaphaja*, *Vata Pittaja*, *Pitta Kaphaja* and *Sannipataja*. In the opinion of certain authors who hold that the temperaments are originated from the material principles of the body, *Vatika*, *Tejasa* and *Apya*, *Parthiva* and *Nabhasa* are the various kinds of temperaments. The temperament of an individual is fixed and can never be abated or altered. Of the nature of temperaments, *Vataja* is said as *Hina*; *Pittaja* as *Madhyama*, *Kaphaja* as *Uttama*, and *Sannipataja* as the best of all.

The importance of the theory is as follows. If a disease of the *Pittaja* origin attacks an individual of the *Pittaja* temperament, it takes an aggravated form and requires to be treated with difficulty due to the nature of the Pathology of the infection (*Pitta* disease) and that of the infected being similar, while the same disease when it attacks an individual of the *Kaphaja* temperament will be less virulent and yields to simple treatment, being easily curable due to the counteraction of the ill effects of the dosha brought about by the antagonistic natures of the disease and its host. Therefore this theory expounds that it is essential to understand firstly *what sort of an individual has been attacked by the diseases, instead of attempting to know what sort of a disease has attacked him*. Thus the theory emphasizes more upon the importance and consideration of the soil (the patient) than upon the seed (disease).

Ayurveda recognises two kinds of land (भूमि) in general, *Divisions of Land.* } viz. (देहदेशम्) physical body and (भूमि देशम्) the common land. The former is divided into various varieties with regard to its phenomenon of temperaments as had already been mentioned as *Vataja*, *Pittaja* etc., while the latter into three zones with reference to its geological and geographical conditions, viz. *Jangala* (Hot), where *Vata* predominates in the temperaments of men, animals, birds, and drugs etc. habitating in it, 2. *Anupa* (cold),

in which Kapha dominates and 3. *Sadharana* (temperate), in the province of which all the doshas are in an equally balanced condition.

Drugs habitating in a country effectively remedy diseases
The Law of Nature } that spring in that particular place as
 specifics.

The year is divided into two main divisions of six months each, *The division of Kala (Time)* viz 1. *Dakshinayanam* or when the sun is over the Tropic of Capricorn consisting of the three subseasons, the *Varsa* the *Sarad* and the *Hemanta*, of two months each, during which respectively the acid, saline and sweet tastes grow strong and all living animals gain in strength. (2) *Uttarayanam* is the time when the sun is over the Tropic of Cancer which comprises the three sub-seasons of *Sisira*, *Grishma* and *Vasanta*, of two months, each, during which bitter, pungent and sour tastes grow in intensity and all the animals lose their strength gradually. The natural accumulation, aggravation and alleviation of the three doshas during these six seasons have already been mentioned previously. The period consisting of the last seven days of the finishing season and the first seven days of the ensuing season are termed as *Ritu Sandhi*.

Though the year is so divided into six seasons of two months each, it is divided into three main seasons in accordance with the climatic phenomena as *Sita* (cold) comprising the two sub-seasons of Hemanta and Sisira, *Ushna* (Hot) consisting of the Vasanta and Grishma and thirdly *Varsha* (Rains) which includes the remaining portion of the year.

By yoga is meant the correlation or the climatic nature in this *The three yogas of time* } respect. Verily such is of three varieties, viz. *Hina* (absence of the natural climatic conditions); *Ati* (excess of the natural climatic conditions), and *Mithya* (injudicious presence of climatic conditions as rains in Sita and cold in Summer etc).

The Four Essentials of Medical Science are the Physician, the medicine, the nurse and the patient, among which the Physician is considered to be the most essential just as the clay and the turning wheel etc. are useless without a potter.

The Vegas are the urgings of nature, viz. flatus, feces, urine, sneezing; thirst, hunger, sleep, cough, breathing induced by tiresomeness; yawning, tears, Kramni Collect, Haridwar, sneezing, belching and semen.

For obtaining happiness in this as well as in the next world,
Vegas that should be suppressed for the prevention of diseases. } one should suppress the impulses of *Lobha* ;
Asuya ; *Dwesha* ; *Matsarya* and other
Ragas, as pride, shamelessness etc.

When Vayu is in predominance, it is called *Krura* (Hard), when
The four kinds of Koshta. } *Pitta* dominates, it is said as *Mridu* (Loose) and
 when *Kapha* is in excess, it is *Madhyama*
 (Middling). When all the doshas are in equal measure, the fourth
 variety of *Koshta* is described as *Madhyama*. But in a *Madhyama*
Koshta, wherein *Kapha* is in excess, vomitings are present, to the
 exclusion of normal purging, while in the second variety of *Madhyama*
Koshta of equally balanced doshas vomitings are absent. Thus
 the differentiation between the two is set forth.

Agni (digestive fire), when it is deranged by *vayu*, is called
The four varieties of digestive fire. } *Vishama* ; when vitiated by *Pitta*, is term-
 ed *Teekshna* (Hyper or Keen), and when
 deranged by *Kapha* it is *Munda* (Hypo or dull) and *Sama* (normal)
 when all the doshas are in equilibrium.

(To be continued.)

The Age-Long Malady of Speech.

By "T. M. K." (K. M. TALAGERI), SAGAR.

Stammering ? Why, stammerers existed even before the birth
 of Christ. Moses was a stammerer, and so was Demosthenes, the
 Greek orator of repute. So, this is an age-long malady of speech.

What is the cause of stammering ? It is like this: Look at
 a person who is learning to drive an auto-mobile. He is too con-
 scious of the mechanism and that leads him into trouble. Such is
 the stammerer's state. "An over-active brain, in many cases," says
 Carl Winkler. The stammerer stammers because he has an un-
 usually quick brain. The victim thinks faster than he can talk
 and so the confusion results. "The active brain," says Winkler,
 "is so far ahead in thought, the speech processes cannot keep pace
 with the mental impulses. Therefore, the forming of mental im-
 pulses through the speech processes in a manner too rapid for the
 speech equipment to receive them causes a mental confusion ; the
 mental confusion causes a mental blockade, and the stammer

begins." Stammering and stuttering are real afflictions. And he alone who is a stammerer knows the mental anguish caused by this impediment.

The average stammerer is very intelligent, according to Mr. Winkler. Stupid persons rarely stammer. It is usually the unusually intelligent child that stutters. And the adult who stammers is a bright person, nine times out of ten, and the average, Mr. Winkler thinks, is better than that. So much so, when you deal with stammerers or stutterers, you are up against some real brains. It is gross fallacy to consider a person with a speech defect to be a "dumb bell." If he were dumb, he would not stammer.

So, we see that stammering and stuttering are mental defects which can develop some complexes. There is the "inferiority complex" (the most prevalent), the "mother-and-father complex" and the "teacher-and-playmate complex." Usually, the speech defective person is self-conscious, sensitive, impressionable, bashful, and nervous.

There are many theories regarding the remedy of this defect. Some have mechanical devices for the mouth, like pebbles etc., some stammering schools teach mind distraction. But Carl Winkler declares that they can be cured only through mental re-education. To quote him further, "When a person learns to drive a car, he must first make conscious effort to learn its mechanism. He becomes conscious of the starter, the clutch, the brakes, and other parts. Later, the operations become automatic, and he does not think of them.

"The stammerer learned incorrectly to operate his voice, and his mental hazards began. He stuttered on words beginning with B, P, L, M, T, and S. He believed that these sounds were impossible to produce. No one showed him how to produce them and pronounce them, and so, he stumbled on.

To correct this, Mr. Winkler believes, the process must be reversed. Each defect must be analysed and the stammerer shown how to make the correction for himself. He wants to know why his lungs lock, if that is the trouble, or why his throat becomes constricted, the tongue stiff and the lips adhesive. He wants to know, conclusively, why these happen and the method of correction. He must have no doubts in his mind; otherwise there will never be a correction of his speech defect.

Ayurveda and some Western Medical Sciences.

BY KAVIRAJ K. P. SANKARA PILLAI, B. A.

ETTUMANOOR, TRAVANCORE.

Not a few amongst Indians pride themselves that the ancestors of the modern so-called civilized nations owe their knowledge of the various Sciences to the ancient Indians. Let us see how much the Westerners are indebted to India for their Medical knowledge. When we compare modern medical sciences one by one with Ayurveda, we can understand how much they are indebted to Ayurveda.

When the other religions of the World promulgate each its own and invariably one-sided path for the realization of the soul (Moksha), Hinduism gives a number of practical methods, any one of which is sure to lead one to Salvation. Similarly when the different medical sciences give a "unprincipled" (if I may use such a term) course in the treatment of diseases, Ayurveda successfully cures diseases in a number of ways, i. e. through different Principles of treatment. Just as राजयोग (Rajayoga), भक्तियोग Bhakthiyoga, करमयोग (Karmayoga) ज्ञानयोग (Jnanayoga) and others comprise the various practices that lead the soul to Salvation, So also :—

1. Hetuviparyayam (हेतुविपर्ययम्),
2. Vyadhiparyayam (व्याधिविपर्ययम्)
3. Hethuvyadhiparyayam (हेतुव्याधिविपर्ययम्)
4. Tadarthakari (तदुत्थकारी) and others include all the methods of treatment of diseases.

Homoeopathy. In the successful cure of diseases, when the first three methods fail, Ayurvedic practitioners are advised to resort to the fourth, i. e. Tadarthakari, which means "that which induces the same". In Hydrophobia, for example, the pre-final stage is delirium, the truth of which nobody questions. It has been the common practice of Ayurvedic practitioners to apply Datura (धतुरम्) to the patient in order to restir the symptoms of madness all on a sudden. If we use Datura under normal conditions of health, it will bring on violent symptoms of madness. Hence in Kerala it is called Ummathu, i. e. that which induces Unmadam (Madness). Again it is a common practice in Ayurveda to inject mercury, in which a proportionate quantity of poison (Aconitum) has been mixed, to remove suspended animation brought on by Typhoid and snake poison. Thus it is a particular course of treat-

ment in Ayurveda to treat poison by poison, diarrhoea by purgatives, impure blood by medicines which in their raw stage viciate blood. This is the very system what the famous German Doctor Hahnemann has codified under the name of Homœopathy. Though this is a new system to the westerners, there is nothing new in it to the Arya vaidyas. Like homœopathic doctors, Ayurvedic physicians, in treating with Tadarthakaris, generally use single medicines. These facts bear ample testimony to prove the indebtedness of *Homœopathy* to Arya vaidyas.

Biochemistry. Arya vaidyas did very well know the composition of bones, brain, blood, etc. They used to treat Anaemia, i. e. want of red blood corpuscles in the blood, with iron compounds, such as Navayasachooram, Mandooravadakam, Lohasavam and others. This is done with a view to set right the equilibrium of iron compounds in the blood of the diseased. To treat weakness of brain with elitoria which contains a good proportion of Phosphorus compounds and to treat bone diseases with substances such as Pearl, conch and other shells of Molluscs which are largely composed of calcium are practices in Ayurveda older even to the oldest European civilization. This practice of treating diseases by supplying deficiencies in the tissue salts has been recently published by the German doctor Schussler under the name of *Biochemistry*.

Again 'Nature Cure' believed to be of indigenous growth in Germany is not new to Indians.

Vinapi bheshajairvyadhi,

Pathyadeva vileeyatey.

i. e. without any medicine diseases can be cured by suitable diets etc. The 'Hipbath' characteristic of 'Nature Cure' is called 'Avagahanam' by the Aryavaidya. Arya vaidyas used to prescribe 'Hipbath' (the water used may be pure or a dilute mixture of medicines) in constipation, retention of urine or in urinary calculi. They used to advise smearing the body with pure clay, black, brown or white, in diseases of the skin. In their humble way, they called sun-bath as 'Bhaskar-aradhanam.' This was intended to cure obesity and skin diseases. Here also fruits, roots and pure water are considered to be the best of diets for patients undergoing Nature-cure. Thus when we see that in every detail related in the Western Nature Cure, Ayurveda stood preeminent, we cannot but look upon those Rishis, the pioneers of Hindu culture and civilization, with awe and

admiration before whose profound knowledge the present day attempts look ridiculously puny as the firefly look in the glorious summer sun.

Allopathy or the English system of medicine now stands distinguished for its surgery. Without surgery, *Allopathy* is very deficient as a curative science. We know from the ancient Hindu Medical book "*Susrutha Samhita*" that surgery was not only not unknown to *Arya-vaidyas* but was far superior to the present day surgery. Unfortunately the fabulous wealth of India excited the cupidity of foreigners from far and near and under the tramp of raiding horses the very flower of Hindu culture was crushed beyond the hope of easy repair. Amongst the many things that are irretrievably lost to our Mother India she lost her 'surgery' also. To crown all these, there came, at this juncture, from Emperor Asoka, the blighting frost of an imperial proclamation to the effect, that in respect of the glorious principle of *Ahimsa*, nobody should hurt any living body with an instrument. In this respect, the exemplary rule of the Emperor did a disservice to the country's civilization. Lack of patronage from princes has also undermined the successful advance of *Ayurvedic Surgery* and practice. That *Ayurvedic surgery* by far excelled that of the *Allopathic* can be proved by a few facts. Removing the child from the womb of the mother by cutting open the stomach, opening the skull to treat brain, to mobilise the vital forces of the body in some particular part and to operate on the diseased portion, successful rejuvenation by a practice called "*Kundeepravesikam*" are practices that existed among *Arya-vaidyas* at a time when English history or rather European history was exshrouded in an impenetrable veil of paleolithic oblivion. In surgical operations the suspension of animation was induced by an equivalent of chloroform called '*Sammohini*.' Even with small fraction of the amount of money squandered in western research laboratories and with the aid of princes and nobles, our system, the most magnificent of its kind, will certainly find a day of resurrection, whence it will radiate from its centre in India and assail every European system of treatment. The most famous of our books "*Charakasamhita*" and "*Susrutasamhita*" are said to have been first translated into Arabic by Arab merchants and subsequently into other European tongues. On examination, one can find the surgical instruments of *Allopathy* to exactly coincide with those of *Susruthasamhitha*.

In Ayurveda the drugs are prepared from plants, minerals and animals. Though the two sciences differ in their purification and application, that they agree in several other points itself proclaims the obligations of Allopathy to Ayurveda. The most ancient of Ayurvedic books advise injection of medicines into the system while it is a very recent invention in Allopathy. Sarangadhara is seen to have prescribed "Laghusuchikabharanarasam" (लगुसुचिकाभरणरसम्) into the head, centuries before the birth of Allopathy. Even at such a remote period, there existed and remains to this day the practice of treatment by "*Ejections*" (Siravedam) which has not yet dawned in the horizon of Allopathic knowledge. Diseases otherwise impossible have been successfully cured by Siravedam (Ejection).

Reduction and transmutation of minerals and treatment with them is a crowning glory of Ayurveda. This practice of reduction and transmutation was once held in superstition and attributed to many similar beliefs of the mysterious Indians. But western scientists have at last come to realise the truth of the theory that when matter is reduced to "electrons," transmutation is quite easy. Ayurvedic chemistry gives many devices by which copper is made into gold. It says that if the juice of a particular species of Oldenlandia (that which has got a shining golden colour) is poured on red hot copper, in a definite proportion, the copper changes at once to gold. The author of this article has himself tried and been an eye witness to this wonderful transmutation. The experiment may or may not take effect according to the derangement in the quantity of the juice and heat. Any how, my experience has clearly shown that this and many similar experiments can successfully be conducted by the industrious.

Centuries before Darwin, far far in the remote B. C's Sarangadhara found out that plants have life and he codified a system of treatment for them known as "Vrikshayurveda", i. e. Treatment for trees. Nor were our ancestors backward in Veterinary science. 'Palakapya' and others are books of animal treatment. They have found out medicines by the influence of which animals such as dogs, cats, cobras, wild elephants, camels etc. may be made docile and brought completely under control. As the publication of them may induce the unfledged to practise them which is productive of dangerous results, I refrain from it for the present.

The freedom of our dear mother land remains in the resurrection of our ancient civilization and in the utter abolition of modern inventions with their incommodious paraphernalia. Our Rishis have practically shown us that man is completely self-sufficient. Then why not work for the realisation of this, rather than follow the delucive meteor of occidental 'unrest.'

All Bengal Ayurveda Conference.

It has been decided at the last meeting of the Reception Committee that the All Bengal Ayurvedic Conference would be held during the Ester holidays instead of during the Christmas days. About 200 Ayurvedic Physicians from different parts of Bengal have expressed their willingness to join the Conference and it is expected that the number will go beyond a thousand if the Conference takes place during Ester holidays. It is also confidently hoped that suitable arrangements will be made for their accommodation and boarding. It has been decided to make the Conference a real success and the exhibition a means to give new light to the country regarding health and education. No pains are being spared to collect original and thoughtful contributions on subjects Ayurvedic with a view to glorify the Conference at this juncture of revival of the old science of Healing. Already a good number of contributions has been received and it is expected that many more will be forthcoming. Attention of our countrymen, especially that of Ayurvedic practitioners, who are still lagging behind, is respectfully drawn to this matter of vital importance.

Sd. KAVIRAJ INDUBHUSAN SEN,
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Medical News.

Lead in Cosmetics.

In 1930, Professor R. B. Hawes observed symptoms suggestive of lead poisoning in a number of Chinese girls in Singapore and it was subsequently discovered that certain brands of face powder contained lead compounds. A number of samples of local face powder was accordingly submitted for examination by the Health Authority of the Federated Malay States, and of 51 such samples, 14 were found to contain lead, usually in the form of the carbonate, one specimen containing as much as 43 per cent. As a result this investigation was gazetted under Section 27 of The Sale of food and Drugs Enactment, 1913—"No lead, or any compound thereof, shall be added to or be an ingredient or component part of any cosmetic preparation." Subsequently, a further rule was made prohibiting the sale, advertisement for sale, or importation of cosmetics containing lead or any compound of lead.

The Hydrogenation Process.

For some years countries without indigenous oil supplies have devoted attention to the manufacture of oil from their coal and lignite, because an ever-increasing quantity of oil is imported into these countries with an adverse effect on their trade balance.

Hydrogenation provides a complete solution of this problem from the technical point of view, says Mr. K. Gordon, of the Imperial Chemical Industries (Fertiliser and Synthetic Products), Ltd., Billingham, England. Coal, lignite, shale oil and tars can now be completely converted to oils, except for small amount of gas and residue which are consumed in the process. The hydrogenation process has been developed mainly for the production of motor spirit, which, at the same time, is the most valuable oil and the one consumed in the largest quantity. Nevertheless, it is possible to produce heavier oils by a slight modification of the process. The process has been developed in semi-technical plants in the laboratories of the I. C. I. at Billingham, and in an experimental plant treating 15 tons of coal a day, also at Billingham. In order to understand hydrogenation it is necessary

to compare the compositions of the raw materials and the finished products. Petrol contains 12—15 per cent. of hydrogen, a mean molecular weight of about 100. Heavier oils have higher molecular weights and generally smaller proportions of hydrogen.

There are three essential differences between these oils and raw materials—coal, lignite, tars and shell oils, the latter being characterised by

(a) The presence of impurities : ash—which is an accidental impurity in solid fuels—and the elements oxygen, nitrogen and sulphur. By treatment with hydrogen, these elements can be removed as water, ammonia and sulphuretted hydrogen.

(b) A deficiency of hydrogen. The hydrogenation process supplies this deficiency.

(c) Too great a molecular weight. The molecular weight of hydrocarbon oils can be decreased by "cracking," since at 400°—500° C, heavy oil molecules decompose into smaller molecules. The complex coal molecule cannot be decomposed in this way unless it is first saturated with hydrogen to approximate its composition more closely to that of a hydrocarbon oil.

The Hydrogenation process, and that process alone, is thus capable of turning coal (and also, of course, tars and other materials intermediate in composition between coal and oil) into oils.

In the destructive hydrogenation of coal there are four types of reaction proceeding simultaneously :

(a) Removal of oxygen, nitrogen and sulphur, by reduction, *e. g.*, the conversion of phenol into benzene and water.

(b) Saturation of unsaturated compounds.

(c) Cracking.

(d) Gas formation.

This last is an undesirable reaction which is minimised by careful control of conditions. The conditions of hydrogenation must be carefully chosen so that reactions (a) to (c) proceed at the right relative speeds. If the cracking reaction is allowed to predominate, coke and excessive quantities of gas are produced. The conditions which can be varied during the process are pressure, temperature and the kind of catalyst. For most hydrogenation processes it is essential to work at 200 atmospheres' pressure at least. At lower pressures, the concentration of hydrogen is not enough for the

hydrogenational reaction to proceed with sufficient speed. The temperatures required vary from 400° to 500° C., and accurate temperature control is highly important.

Catalysts are now of first importance in hydrogenation technique. When the material to be treated is a solid or liquid under the working temperature and pressure, it is treated in the liquid phase in the presence of finely divided catalyst. When the material exists under hydrogenation conditions as a vapour, it is treated in the vapour phase in the presence of solid catalyst. In liquid phase hydrogenation, if coal is the raw material, this is finely ground and mixed into a paste with heavy oil so that it can be treated as a liquid. The feed material is pumped through heat exchangers and heating tubes, together with the necessary hydrogen. At the desired temperature it enters the converter or reaction vessel. This vessel is full of liquid oil, the coal and catalyst being kept in suspension by the agitation of the bubbles of hydrogen. The hydrogenation reaction takes place, and light oils, as they are formed, are evaporated and leave the vessel as vapours mixed with excess of hydrogen steam, ammonia, H_2S and hydrocarbon gases. A portion of the liquid contents of the converter are purged continuously as sludge to remove ash and any part of the coal not converted to liquids. The vaporous products are cooled and light oils and aqueous liquor separated out. Vapour phase hydrogenation has been devised for materials boiling below 300° C., which are completely vapourised under hydrogenation conditions. The vapourised oil mixed with hydrogen is heated to reaction temperature and passed through a vessel filled with catalyst. By varying the catalyst it is possible to control the nature of the products. More active catalysts working at lower temperatures give saturated products, less active catalysts give aromatic petrols with better knock ratings.

Scorpion Venom.

Scorpion venoms are very complex liquids which consist of the following active principles :—(1) Neurotoxins acting principally (a) on the respiratory centre and partly on (b) the vasomotor centre, (c) on the nerve end-plates in striated muscle, (d) on plexuses in the unstriated muscle, and (e) on the responsive mechanism of the parasympathetic and the sympathetic in the secretory glands; (2) hæmolysins, agglutinins, hæmorrhagins, leucocytolysins, coagulants, ferments, lecithin, and cholesterol; (3) a cardiac tonic; (4) a

viscous tonic. The agglutinins present in the venom point to important generic difference ; and the hæmolysins indicate specific variations. Scorpion venom closely resembles snake venom. The antivenom prepared at Kasauli against cobra and daboia venoms imparts a certain amount of protection to rabbits and dogs which have received lethal doses of the venoms of *Buthus tamulus* and *Palamnaus swammerdami*.

None of the Indian plant remedies popularly used in the treatment of scorpion sting has been found to have any preventive, antidotal, or therapeutic effect.—(B. M. J.)

Joint Secretary Vaidya Sabha Lahore writes :—

The annual meetings of Vaidya Sabha Lahore took place on the 28th current in the D. A. V. Middle School premises, where the annual report was read out by Vaidya Ram Gopalji Shastri. The following new office bearers were elected :—

1. Vaidya Mela Ramji, President.
2. „ Chuni Lalji, Senior Vice-President.
3. „ Durga Duttji, Junior Vice-President.
4. „ Ram Gopalji Shastri, Secretary.
5. „ Rameshwar Singh, Joint Secretary.
6. „ Sardari Lalji, Cashier.

After the election, the members were photographed and served with light refreshment.

(3) MUNCHENER MEDIZINISCHE WOCHENSCHRIFT,

Dr. Kurt Ochsenius,

“Zur Behandlung der Bronchopneumonien im frühen Kindesalter”,

(On the treatment of the bronchopneumonias in early childhood).

The author states at the beginning of his article that the treatment of gastrointestinal catarrh of infants has advanced considerably during the last years and that Cholera infantum, previously so much feared, can be successfully treated, even during the summer season. The next problem in pediatrics, the author sees is the successful treatment of broncho-pneumonia in early childhood which is still said to show a mortality as high as 80%.

Next to proper prophylaxis the author recommends a continuous change of position of the infant and the application of hot kataplasms which will retain the heat for hours, and also preparations of quinine. This treatment was successfully applied in 50 cases and the author therefore believes Antiphlogistine to be the ideal method of applying continuous moist heat.

Reports of Societies, Etc.

REPORT ON THE ADMINISTRATION

OF THE

Department of Ayurveda, Travancore State.

FOR THE YEAR 1106 M. E. 1930-31 A. D.

Introductory.

Early History of Ayurveda in the State.

Under the term Indian Medicine, as it is in vogue at present, three systems of indigenous medicine, namely Ayurveda, Sidha and Unani are included. Ayurveda is as old as the 'Vedas' themselves having Sanskrit as its main language of expression. Sidha medicine, which forms only an offshoot of Ayurveda, is special to South India, Tamil being the language in which it is written. As for the Unani it is of Greek origin introduced to India by the Mahomedan Conquerors of the medieval age through the medium of Arabic literature. The fundamental principles of Ayurveda and Siddha are almost identical, only the latter lay more stress in the method of diagnosis by the pulse and the use of mineral preparations. The Unani system, though akin to these two, differs in certain cardinal principles from the classical knowledge, having a leaning towards the Western medicine. Ayurveda in its wider sense means the great Healing Art of India, which was once in its acme of glory.

2. Ayurveda has developed in different ways in different countries in this vast sub-continent of India. Herbal preparations are more prominent in some places, while metallic preparations are much valued in other places. The *Sastric* methods of treatment, such as *Sneha*, *Sweda*, *Vasti* &c., have been developed considerably in places where such treatments are often resorted to owing to climatic and natural conditions. Single herbs are more prominent in certain places. There are also experts in several places in the treatment of poison-cases, eye-diseases, Jaundice, Leprosy, Rheumatism &c. These are various methods of treatment according to

Ayurveda, the most essential requisite for the physician being a correct understanding of the *Tridosha* theory (Vata, Pitta and Kapha), the bed rock of the science of Ayurveda.

3. The history of the development of Ayurveda in this State has not been totally devoid of variety or of incident. In Kerala the followers of Vaghbhat (author of *Ashtanga Hridayam*) established themselves very early as medical practitioners. Relics of their institutions (Viharas) do exist in Travancore also even at this remote period. Indu and Jajjata, the famous commentators of Vaghbhat lived in Kerala. They had many disciples, the more prominent being the original 'Ashta Vaidyans' of Kerala.

4. The State's participation in the work of encouraging Ayurveda began over half a century ago. Till then as for many succeeding decades hereditary families of physicians were administering to the medical needs of the people. Between 1729-1759 A. D., by the time the process of consolidation of the various principalities into a unified Travancore was effected by His Highness Sri Marthanda Varma of revered memory, the medical skill of these families in the north and south Travancore was enlisted, chiefly during festive occasions as also for military purposes.

5. Of these 'Ashta Vaidya' families of Kerala, the families of *Vyskara* and *Cheerattamon* are the well-known repositories of Ayurvedic treatment in Travancore. Many persons, irrespective of caste or creed, learnt the science and art of treatment from the members of either of these families, and established themselves as medical practitioners in different places in the State in North and Central Travancore, while in south Travancore the *Agastya school* (Sidha) of native treatment developed owing to its direct and easy contact with the 'Tamil Nadu'.

6. The genesis of the formation of a Government Department can be traced back to the royal patronage enjoyed by many such families throughout Travancore. It was on the 3rd Thulam 1051 or A. D. 1875 that Government sanctioned the appointment of Mr. Kaviyur Parameswaran Moothathu, who had learnt and practised the native system of medicine as a native physician at Trivandrum on Rs. 15 per mensem, which was subsequently raised to Rs. 25 in 1054 with a view to meet the expenditure he incurred for preparing medicines. This subsidy was revised at frequent intervals till in 1061 he was enabled to draw Rs. 50 per mensem. In Medom 1064 Mr. Parameswaran Moothathu recommended the opening of an

Ayurveda Patasala to encourage the study of *Ashtanga Hridayam*. He also recommended to Government that Ayurvedic Physicians should be appointed in each taluk, that their number should be increased at a certain rate per annum, and that proper arrangements should be made for the conduct of their vaidyasalas. The Government accordingly granted allowances to certain three native physicians, and Mr. Moothathu was asked to start a class to teach *Ashtanga Hridaya*, and an allowance of Rs. 20 per mensem was also sanctioned to him for the purpose. The school or the Ayurveda Patasala was thus started on 1st. Thulam A. D. 1869 by Mr. Moothathu. He was also given an assistant in his teaching work. There were 15 students at first to receive instruction. In Kanni 1066 the senior Koil Tampuran of Ananthapuram was appointed on an honorarium of Rs. 200 per annum to conduct the examinations. In Meenom of the same year the course of instruction was extended to 4 years for the final examination, known as 'Vaidya Test', and it was also ruled that only persons who came out successful from the school should be appointed as Native Physicians. It deserves special mention that, from the inception of this institution down to the present times, not only no tuition fees are levied, but from Medom 1066 stipends to students were instituted, and at first sanction was accorded to 25 deserving students being given a scholarship of Rs. 3 each per mensem in order to encourage the study of Ayurveda in the State.

7. With a view to supplement the relief afforded by Government Allopathic Institutions and to promote and encourage the practice of medicine by private agencies under organised control, Government sanctioned a set of rules in 1895 A. D. for grant in-aid to medical institutions in which Vaidyasalas also were included. A Board was constituted with two members (Messrs. Parameswaran Moothathu and Kochukrishna Paniker of Kannamangalam in the Taluk of Mavelikara) to advise the Government in regard to applications for grant-in-aid. It was ordered that these grant-in-aid institutions should be at least two miles distant from a Government Hospital or dispensary or another Vaidyasala, and they should submit to Government periodical returns fixed by Government, such as daily Cholera reports when the disease is raging, with the number treated and also returns of the patients treated in each month. The members of the above-mentioned Board were required to submit to Government with their remarks the reports and monthly statements due from the native physicians.

8. Supplemental rules were passed by the Government in Dhanu 1072 under which applications for grants-in-aid were to be submitted to the Huzur or to the local Tahsildar who was required to report on each application in regard to the necessity, expediency and usefulness of the Vaidyasala to be opened. Time was prescribed for attendance for the Vaidyans in their Vaidyasalas. The Board, the Senior Koil Tampuran of Ananthapuram and the local Revenue Officers were empowered to inspect the Vaidyasalas and to enter their remarks in the diaries kept there, extracts from which were to be sent by the Vaidyans along with the usual returns to the Board, who were made responsible for the control and conduct of business, according to the rules, in the Vaidyasalas.

9. From Meenom 1073 the following arrangement was made for the business of inspecting the Vaidyasalas. The State was divided into 2 Ranges for this purpose, the Northern consisting of 16 Taluqs and the Southern of 15. It was also arranged for the Vaidyasalas in each range being inspected by the two members of the Board in turns. In Thulam 1075 these rules were modified, according to which Mr. Parameswaran Moothathu was put in charge of the Southern Range, with Trivandrum as Headquarters, and Mr. Kochukrishna Paniker in charge of the Northern, with Alleppey as Headquarters. They were required to inspect all the Vaidyasalas not less than twice a year, and submit their reports to Government direct. But Mr. Parameswaran Moothathu was entrusted with the work of collecting all the returns due from Vaidyans and forwarding them to Government. He had also to report on applications for grants from both the ranges. With the death of Mr. Kochukrishna Paniker in Chingom 1079, Mr. Parameswaran Moothathu was in full charge of the Inspection work also.

10. In 1083 there was a re-organisation according to which Mr. Parameswaran Moothathu was appointed as the first Superintendent of Vaidyasalas and Ayurveda Patasala and given a pay of Rs. 75-5-100 and the number of teachers in the Ayurveda Patasala was increased to five.

11. In 1086 one of the Vaidyasalas was abolished, while 4 new grant-in-aid Vaidyasalas were established, and the grants to 9 Vaidyans were increased. The Superintendent was given some administrative powers. This state of affairs continued without much change till the end of 1092, when there were altogether 73 grant-in-aid Vaidyasalas receiving grants-in-aid varying from Rs. 7 to Rs. 30. The only State-owned institution then was the Ayurveda

Patasala where the course of instruction was extended to five years, instituting two public examinations, one at the end of the fourth year, known as the Ayurveda Lower Medical Certificate Examination and the other final one as the Ayurveda Higher Medical Certificate Examination. Messrs. Avoor N. Velu Pillai, Vasudevan Unni and P. Venkiteswara Sastrial were some of the prominent teachers whose eminence in the field of Ayurveda was acknowledged by all. Mr. Vasudevan Unni later on became the Assistant to the Superintendent, which office was abolished in 1092 after the permanent incumbent's death, and Mr. Sastrial retired as the Principal of the Ayurveda College in 1100.

II. Constitution of a separate Department for Ayurveda.

12. Towards the close of 1092 Mr. Parameswaran Moothathu was permitted to retire from the service on a special pension of his full pay of Rs. 100 in consideration of the fact that his connection with the Department had been long and useful and that he had done much to bring the Department to an efficient state. This pension was granted exclusive of Rs. 50 per mensem which he was eligible to draw during his life time as Palace Physician. Dr. Kolatheri Sankara Menon M. A., L. T., Ph. D, succeeded him from 1st Chingom 1093. Direct State effort in a more tangible form for the revitalisation of Ayurveda in Travancore commenced from his period. Several important changes took place. Dr. Sankara Menon was appointed as the Director of Ayurveda by constituting a separate Department known as the Ayurveda Department instead of the native Vaidyasala Department with a Superintendent at its head. He was given full administrative powers enjoyed by other Heads of Departments.

13. The main features of the re-organisation effected in 1093 were :—

- (1) The Revision of the curricula of studies in the Ayurveda College (then Patasala) on an up-to-date and scientific basis to suit modern requirements.
- (2) The enlargement of the Library attached to the Ayurveda College.
- (3) The increase of stipends from 25 to 40.
- (4) The appointment of a lecturer in Modern Anatomy, Physiology and Hygiene in the Ayurveda College.

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- (5) The establishment of a Botanical Garden.
- (6) The establishment of an Ayurveda Hospital and Dispensary and
- (7) The opening of an Ayurvedic Pharmacy for the supply of medicines to the Ayurveda Hospital and Dispensary.

14. The pay of the Head of the Department was revised and fixed at Bh. Rs. 200-25-300. The powers of the Director of Ayurveda were revised in (1927) and almost all administrative powers generally sanctioned to the Heads of Departments were conferred upon the Director. His Office staff was also strengthened in order to cope with the increase in the volume of work. The post of the Inspector of Vaidyasalas was created in 1936 in order to assist the Director in Inspection work.

15. The publication of Ayurveda manuscripts was undertaken by the department from 1101. A Temporary Vaidya Pandit was also sanctioned for this purpose. The following are the works published by the Department :—

1. Vaidya Manjari (Malayalam).
- 2- Rasa Vaiseshikom (Sanskrit).
3. Jyolsnika (Malayalam),
4. Tantra Yukti Vicharam (Sanskrit).

The printing of *Ashtanga Hridaya with Hridaya Bhodhika* commentary as also of *Ashtanga Sara, Hridaya Priya and Yoga-mritha* was in progress when the publication was ordered to be transferred to the Department for the publication of Oriental Manuscripts with effect from 1106.

16. The Botanical Garden for familiarising the pupils of the Ayurveda College with medicinal herbs opened in 1094 in the Mudavankunnu Gardens at Poojappura had to be abandoned in 1096, and it has now been decided to make a start for an Ayurveda Herbarium in the Public Gardens at Trivandrum, where it is proposed to open a small collection of indigenous Medical plants in the garden conservatory.

17. It is now nearly two decades since the Ayurveda College (then Patasala) was thrown open to all classes of the students, irrespective of caste or creed. The Ayurveda Patasala was raised to the status of a College in 1096. The recent activities of the Department, first of all, transplanted the centres of instruction in

Ayurveda from the homes of reputed Ayurvedic Physicians to special well-organised institutions with up-to-date equipment and methods of teaching. The existence of the Ayurveda College at Trivandrum and four aided Ayurveda High Schools in the mofussils are instances in point. Such an arrangement for imparting instruction in this technical subject has contributed, to a great extent, for bringing the system to a level of recognition which it now enjoys. The candidates that are turned out of these institutions being duly qualified in the science and better equipped in the art of treatment, will prove better fitted to combat the ills of life and, it is hoped, that the presence of such duly qualified physicians will also succeed to weed out, to a certain extent, the innumerable quack physicians.

18. The initiative taken by the Department in the matter of opening the Ayurveda Hospital at the Capital has also given an impetus to the Ayurvedic practitioners to start regular Ayurvedic Hospitals, which afford better facilities for treatment as well as for clinical studies. There are now 3 aided Ayurveda Hospitals at Quilon, Nagercoil and Kilimanoor respectively. The maximum of 120 Vaidyasalas sanctioned by Government to be opened in the proportion of one Vaidyasala for 4 Pakuthies *on an average* was reached in 1104, and 5 more Vaidyasalas were sanctioned to be opened raising the total number of Vaidyasalas to 125 during the year under report. In order to enlarge the sphere of activity of the indigenous medical practitioners, including expert and popular Vaidyans without any hall-mark of qualifications, and bring them also on a level of recognition, a scheme for the award of recognition was recently formulated by the Department and there are at present 98 such recognised Vaidyasalas, in addition to the above-mentioned aided Vaidyasalas scattered throughout the State.

19. Passing through the various vicissitudes of fortune for more than half a century, the Department has come to stay. Still the problem of advancing the cause of Ayurveda remains to be tackled within its many aspects. The question is how to give a new orientation to Ayurveda, and adapt its methods to the needs of the scientific, competitive, and critical epoch of civilisation that is fast establishing itself in the soil. What is therefore needed is to afford all facilities for a full and all-round revival of Ayurveda under the kind solicitude of the Government.

III. Salient features of the year 1106.

20. In order that the present position of Ayurveda in the State may be more easily grasped and the development of the Department better understood, the above departure by giving a sketch of the land-marks in the history of the progress of Ayurveda in the State was made as a preface in writing this report. Now the chief features of the administration of this Department during 1106 are given below as usual.

(i) PERSONNEL.

21. I continued to be in additional charge of the duties of the Director of Ayurveda throughout the year 1106, the post of the Director which fell permanently vacant, consequent on the retirement of Dr. Kolatheri Sankara Menon M. A. L. T. Ph. D. (Madras) in 1105, remaining unfilled. The University of Madras was pleased to appoint me as an Examiner for the Oriental Title Examinations, *Ayurveda Siromani*, conducted by the University.

(ii) GENERAL.

22. The second list of Vaidyans deserving State Recognition submitted to Government for their approval in 1105 was ordered to lie over for being considered after the Advisory Board for the Ayurveda Department is formed. As foreshadowed in my last year's report, the municipalities of the State are evincing greater interest in encouraging Ayurveda, and no less than 7 Vaidyasalas were subsidised by the different Municipal Councils during 1106, raising the number of such Municipal aided Ayurvedic Vaidyasalas from 8 to 15.

23. The Ayurveda Hospital opened at Nagercoil was awarded the maximum grant-in-aid of Rs. 50 with effect from 1st Chingom 1106. The Aided Vaidyasala there was consequently abolished. Out of the five Vaidyasalas sanctioned to be opened in 1105, only 2 were opened in that year. The remaining 3 Vaidyasalas were opened during 1106 at Pulimath (Chirayankizhu), Chennithala (Mavelikkara) and Shertally Town respectively.

24. With the formation of a Department for the publication of Oriental Manuscripts, the publication of Ayurvedic Manuscripts was transferred to the Quater of the Department, the temporary Vaidya Pandit's services also being lent to that Department with

effect from 1st Thulam 1106. Four works on Ayurveda, Hridaya Priyam and Hridaya Bodhika Part 1 (Sanskrit) and Yogamritam and Chikitsa Saram (Malayalam) were almost ready for publication when the transfer in 1106 was effected.

(iii) THE AYURVEDIC EDUCATIONAL INSTITUTIONS.

1. *Ayurveda College.*

25. Though the institution had its origin some forty-two years back, it was raised to the status of a College only recently in 1096, from which date up to this time nearly 200 candidates have passed its portals, duly qualified in Ayurveda as well as in Modern Anatomy, Physiology and Hygiene. Several of them were even from outside the State. Many of those qualified Travancore Vaidyans have gone out of this State and established their practice in Bombay, Madras, Calcutta, Ceylon and other places.

26. The strength of the Ayurveda College decreased from 119 in 1105 to 99 during the year under review. The distribution of students among the various classes was as following :—

| | |
|--|----|
| <i>College Course</i> -Vaidya Kalanidhi Class (Final year) | 17 |
| Vaidya Kalanidhi (IV year) | 18 |
| <i>High School Course</i> | |
| Vaidya Sastri (III year) | 23 |
| Do (II year) | 24 |
| Do (I year) | 17 |
| Total. | 99 |

The percentage of attendance was 79.5 in 1106 against 89.2 in 1105. The existence of the Ayurved High Schools in the moffusils and the financial stringency of the times account for the decrease in the number of students on the rolls of the Ayurveda College.

27. *Scholarships.*

The 40 scholarships sanctioned to be paid in 8 instalments at the following rates per instalment continued to be awarded to the deserving students.

| No. of scholarships. | Amount for one instalment. | Total amount per mensem. |
|----------------------|----------------------------|--------------------------|
| 5 | Rs. 6 | 30 |
| 14 | Rs. 5 | 70 |
| 9 | Rs. 4 | 36 |
| 12 | Rs. 3 | 36 |
| Total, 40 | | 172 |

Of the two Sri Mulam Shashtiabdapurthi Scholarships of the value of B. Rs. 10 and B. Rs. 7, the former remained undisbursed from Mithunam 1106, there being no candidate eligible for the same under the rules governing its award.

23. *Staff.* Mr. K. G. Gopala Pillai continued to be the Principal of the College. Dr. E. K. Raman Pillai L. M. & S. Assistant Surgeon, General Hospital, was in charge of the Dissection class throughout the year as Lecturer on Modern Anatomy, Physiology & Hygiene. Mr. P. Vasudevan Pillai, Assistant in the College, was deputed in Thulam 1106 as a temporary Vaidya pandit to do work in the Office of the Curator for the Publication of Oriental Manuscripts.

29. *Examinations.* The introduction of re-modelled courses of instruction in Ayurveda brought also changes in the Examinations conducted and diplomas awarded. The two Diploma Examinations held in the fourth and fifth year respectively were done away with and one public examination known as the *Vaidya Sastri* Examination at the end of the third year and another examination, *Vaidya Kalanidhi* Examination, at the end of the fifth year were introduced, all the other annual examinations being treated as class Examinations from 1098 onwards. In order to test the knowledge of candidates seeking proficiency in the art of poison treatment a special examination known as '*Visha Vaidya Visarada*' Examination was also constituted in the same year. Two years after passing the *Vaidya Kalanidhi* Examination a candidate is allowed to proceed for the '*Ayurveda Acharya*' Diploma, the highest examination in Ayurveda conducted by the Government.

30. 324 Candidates, in all, appeared for the different Ayurveda Examinations (both public and class Examinations) in 1106 against 341 in 1105. Of these 79 were from the Ayurveda College, 159 from the aided Ayurveda High Schools and the rest were private candidates.

31. 25 Candidates including 6 private candidates appeared for the *Vaidya Kalanidhi* Examination held in 1106, of whom 14 from the Ayurveda College and 1 private candidate were declared eligible for the diploma, against 38 candidates, (6 private), of whom 25 candidates (2 private) passed the examination in the previous year.

32. The total number of candidates that appeared for the *Vaidya Sastri* Examination in 1106ⁿ was 57, of whom 12 were

presented from the Ayurveda College, 34 from the aided Ayurveda High Schools and the rest appeared as private candidates.

33. The percentage of passes in the Ayurveda College for the Public Examination was 74.4, while for the class Examinations it stood at 77.08. The total percentage or passes in the Ayurveda College at all examinations was satisfactory.

34. The number of candidates that appeared in 1106 for the *Visha Vaidy Visarada* Examination was 8 of whom 4 were eligible for the Diploma against 13 appeared for the same examination, of whom 5 secured passes in 1105.

35. *Miscellaneous.* The working of the Ayurveda College during the year under review was satisfactory. Arrangements for the practical training to the students of the College classes in the Ayurveda Hospital and Pharmacy were well-maintained as in the previous years. In the re-constructed Dissection Room, practical dissection of dead bodies was regularly conducted and the students also were given facilities to dissect out and see for themselves the important structure of the body. They were also shown some of the post-mortem Examinations in the General Hospital. A few lectures in Elementary Bacteriology were also delivered to the final year students by the Lecturer emphasising the importance of the subject in modern medical science especially in its application to Public Health work. A new Microscope was supplied to the Dissection class which will facilitate the demonstration of some of the important clinical materials.

36. There has been a steady increase in the number of private candidates examined for the various examinations, but without any corresponding variations in the percentage of passes.

37. A permanent, suitable building for the Ayurveda College with a hostel, recreation grounds and provision for other social amenities is a long-felt desideratum. In view of the present financial stringency it may not be possible for the Government to acquire a site and construct the necessary buildings and equip them properly. Still it is earnestly hoped that Government will be pleased to afford better convenience for the accommodation of the Ayurveda College by placing at the disposal of the Department any one of the Government buildings at the Capital suitable for the purpose.

2. PRIVATE AIDED AYURVEDA HIGH SCHOOLS,

38. Encouragement of private enterprise for the development of Ayurveda being the key-note of the policy pursued by the

Government even from the very outset, it was but natural that the Government readily extended their helping hand to private bodies when they started Ayurvedic Schools in the mofussils. Thus within the last decade 4 Ayurvedic High Schools at Ettumanoor, Changan-
kulangara (Ochira), Ayiroor (Aranmula) and Quilon respectively sprang up with the first three classes coaching up students for the *Vaidya Sastri* Examination. In two other places also one at Vaikom and other at Onattukara, Ayurvedic unaided schools are conducted at present, the question of granting recognition to them being under consideration.

39. The strength in each of the 4 aided Ayurveda Schools was as follows :

| | | | | |
|-----------------------|------------------|------|------|----|
| Ayurveda High School, | | 1105 | 1106 | |
| | Ettumanoor | ... | 62 | 49 |
| Do. | Changankulangara | ... | 51 | 48 |
| Do. | Ayiroor | ... | 57 | 54 |
| Do. | Quilon | ... | 65 | 57 |

The following table shows the distribution of strength in the different Ayurvedic Educational institutions in the State.

40. The percentage of passes in the *Vaidya Sastri* Examination in the Ayurveda College was 75, while that of all the aided Ayurveda High Schools together was only 23.23, the percentage in the class examinations being 76.7 and 51.5 respectively. The results of the class examinations in the aided schools have been somewhat better when compared to their results in the Public Examination (*Vaidya Sastri*). Excepting the High School at Ettumanoor all the other aided institutions have not fared well. The school at Changankulangara has fared miserably. This school, however, is deteriorating ; a separate report shall be submitted soon as to the course of action to be taken in respect of that institution.

41. All the above 4 schools continue to receive the sanctioned grant-in-aid of Rs. 30 each per mensem throughout 1106.

(iv) The Government Ayurveda Hospital and Dispensary.

42. This institution, perhaps the first of its kind in the whole of India, was opened towards the close of 1093, the year which witnessed the formation of a separate Department for Ayurveda in the State. Started as an appendage to the Ayurveda College with provision for in-patients, it soon proved to be a most useful institution for medical aid to the public at large. The following figures of

patients treated from its very inception give an unmistakable indication of the increasing popularity and usefulness of this unique institution.

43. *In-door patients.* The number of in-patients was 177 in 1106 against 143 in the previous year, of whom 141 were males, 28 women and 8 children. Of the total number of In-patients treated 161 were cured, 11 were discharged, 2 died and 3 remained under treatment when the year ended. The duration of treatment undergone by each patient was 14.8 days on an average, and in all some 38 kinds of diseases were admitted for treatment in the in-patient Ward, where the number of beds remained at 8 as in the previous years. The average daily cost of dieting was 5 chs. 2 cash against 6 chs. 2 cash in 1105.

44. There is a great deal to be done for improving the scope and amenities of the institution.

45. *Out-door patients.* The number of out-patients treated in the Dispensary was 49,975. On an average 136.9 new patients resorted to the Dispensary for treatment. The average daily attendance rose from 350.1 in 1105 to 420.9 during the year under report.

46. Facilities provided for treatment by massage form a peculiar feature of this institution. In the *Marma Chikitsa* Ward a total number of 2,034 patients including 22 in-patients were treated for different *Marma* cases such as fractures and dislocation of bones due to a greater number of accidents in the town.

47. *Staff.* Mr. Avoor N. Parameswaran Pillai continued to be the Chief Vaidyan throughout the year. The staff of the institution is to be strengthened without further delay in order to cope with the increasing work every year.

(v) The Government Ayurveda Pharmacy.

48. Want of standardisation in Ayurvedic Pharmacopoeia, as the British Pharmacopoeia provides for, necessitated the opening of a Pharmacy also along with the Hospital as an adjunct to the Ayurveda College. Absence of efficient pharmacies at the time necessitated the opening of a selling Department in the Pharmacy worked under Debt-Head Advances, repayable with interests on the sale proceeds at 10 percent, which had however to be discontinued from 1101 on principle that Government should not compete with private bodies in a similar commercial undertaking. So in its restricted scope the Pharmacy has been meeting

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the demands for the supply of medicines to the Ayurveda Hospital and Dispensary during 1106 as in the previous years, at the same time attending to the training of the students of the Ayurveda College in Pharmaceutical methods. The medicines supplied to the Hospital in 1106 consisted of different varieties, 32 kinds of *Quaths*, 12 kinds of *Choornams*, 9 kinds of *Tailams*, 10 kinds of *Pills*, 3 kinds of *Lehyams* and a few other special preparations.

49. *Staff.* Mr. K. Kunjen Kovil continued to be the Chief Vaidyan of the Pharmacy during the year.

(vi) Private Ayurvedic Medical Institutions.

(1) AIDED VAIDYASALAS.

50. The total number of grant-in-aid Vaidyasalas rose from 120 in 1105 to 125 in 1106 and they were classified as under :—

| <i>Aided Vaidyasalas.</i> | <i>No.</i> | <i>Monthly grant for each.</i> |
|---------------------------|------------|--------------------------------|
| 1st Class Vaidyasalas | 4 | Rs. 30 |
| 2nd Class Vaidyasalas | 9 | Rs. 25 |
| 3rd Class Vaidyasalas | 32 | Rs. 20 |
| 4th Class Vaidyasalas | 80 | Rs. 15 |

In the following 5 places new Vaidyasalas were opened during the year on the minimum grant-in-aid,

1. Visha Netra Vaidyasala Pulimath (Chirayankil Taluq)
2. Visha Vaidyasala Chennithala (Mavelikkara Taluq)
3. Ayurveda Vaidyasala Shertalay Town (Sherthala Taluq)
4. Marmia Vaidyasala Edagramom (Neyyattinkara Taluq)
5. Visha Vaidyasala Poottati (Vilavancode Taluq)

The last two Vaidyasalas were opened by utilising the savings derived out of the grants discontinued to the Vaidyasalas at Kili-manoor and Nagercoil, where aided Ayurveda Hospitals were opened. The Unani Vaidyasala conducted at Mettukada (Trivandrum Town) was awarded a temporary grant of Rs. 15 for 6 months in 1106.

51. The aided Vaidyasalas (including one temporary unani Vaidyasala) stood classified, according to the nature of medical relief afforded, as under :—

| | | | |
|---|---|-----|-----|
| Aided Ayurveda Vaidyasalas for the treatment of | | | |
| | general diseases | | 99 |
| Do. | Siddha Vaidyasalas for the treatment of | | |
| | general diseases | | 1 |
| Do. | Unani | Do. | 2 |
| Special Vaidyasalas—for poison treatment | | | 17 |
| Do. | for eye-treatment | | 3 |
| Do. | (Siddha) Marma treatment | | 2 |
| Do. | for Women and Children | | 2 |
| Total. | | | 126 |

52. The total number of patients treated in the aided Vaidyasalas was 3,85,845 during the year against 4,16,135 in 1105. Of these 95.5 per cent were cured, 37% died and the rest were discharged or undergoing treatment at the end of the year.

(2) GRANT-IN-AID AYURVEDA HOSPITALS.

53. Including the Ayurveda Hospital at Nagercoil opened early in 1106 there were altogether 3 such institutions during the year. Two of them Quilon and Nagercoil Hospitals were receiving the maximum grant of Rs 50 while the Hospital at Kilimanoor was getting Rs. 40 per mensem.

(3) RECOGNISED VAIDYASALAS.

54. The total number of recognised Vaidyasalas including those subsidised by the different Municipal Councils was 98 when the year closed. The above mentioned 5 new grant-in-aid Vaidyasalas opened in 1106 were institutions already recognised. The total number of patients treated in the recognised Vaidyasalas was 1,85,023, of whom 96.09 per cent are reported to have been cured, 36 per cent died and the rest were either relieved or undergoing treatment at the end of the year.

(viii) Financial.

55. The total expenditure including grants-in-aid was Rs. 60,934. The total receipts including the receipts as per credit Invoice on account of supply of medicines from the Ayurveda Pharmacy to the Ayurveda Hospital and Dispensary amounted to Rs. 6,763 leaving a net expenditure of Rs. 54,221 against Rs. 52,193 in 1105.



